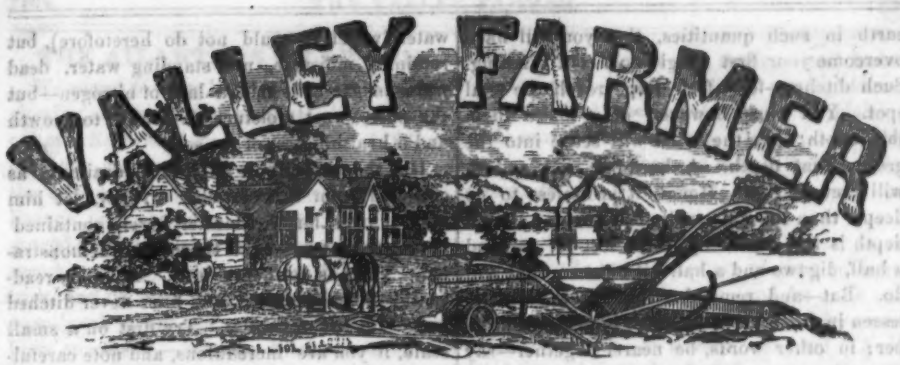

NORMAN J. COLMAN, Editor and Proprietor. BENJ. BRYAN, Publisher.

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TRENCHING.

It is curious what an obstinate thing human nature is. Unless cultivated, man is a sheer animal—a brute force. You cannot get an idea through his prejudiced skull, more than through that of a he-goat. He must be cultivated, first, to learn how very prejudiced he is, and then there is a chance.

We were but just talking with one of this utter dark class. The subject was that of draining. There was great complaint about the backwardness of the spring. We remarked, "An excellent growing time."

"Yes, for grass," he replied; "but the season is backward; people can't do their work."

And yet people had done their work—those few who had, not only done their work because they were enterprising, but because they understood this one, main thing in farming, namely trenching. By trenching, they had secured their ground against the wet which necessarily occurs in every spring. The water at once disappeared; the frost had a less chance; also, disappeared the sooner in consequence of the under-draft, leaving a chance for the air to circulate.

The difference is not only great between trenched and untrenched land—it amounts to a revolution. And this at all times.

"But there are ditches that have but little effect—at least I can't see the revolution," says our back farmer.

True. In all such cases the ditching has been imperfect—all that we have ever noticed—and the principle we know is that. Ditching is highly beneficial and remunerative. Run a ditch the wrong way, so that the water cannot be led off, and you will be sure to have a failure. Run your ditches far apart, and there will be but little benefit—sometimes however more than at other times. Make imperfect ditches, that soon will close up, and your land will continue the same as though it had not been ditched. Trench shallow, and you will get but little benefit.

But take your money in your pocket, however much that may be, and spend it fearlessly for the right kind of ditching, and you will not regret it—not only not regret it, you will see what pleases you more than anything you ever did on your farm. But you must trench deep, except in clay soil, or any hard bottom. You will be frightened at four feet ditching.

"What an expense!"

To dig a grave all along your whole lot, and that repeated often. Well, that does look like expense. But, my dear sir, it is only in the look. Get your Irishman, or any other smart man, and he will throw you out old mother

earth in such quantities, that you will have overcome your first misgiving about ditching. Such ditches—four feet deep—reach the vital spot. You must, however, only make them that depth when the water will settle into the ground that depth. A hard-pan, a clay-bed, will prevent that. Hence, it is useless to go deeper than the water will soak down. If that depth is three feet, dig three feet—if two and a half, dig two and a half—if but two, that will do. But—and remember this—as the ditches lessen in depth, so they must increase in number: in other words, be nearer together—say one rod apart, or a little more, and never more than two. It is but little trouble to run such shallow ditches. You can multiply them to any extent.

Secure your tile and lay that. Or, if you persist in being distrustful of the clay, fill up a foot or more with small stones, and cover with straw or some other substance that will prevent the ground from getting in among the stones.

Be careful when you close your ditch, so that you get good clear drainage. One stop will spoil a drain—but well made, and it will last forever.

A ditch run along the foot of a hill where water oozes out, where the ground seems springy—will often dry a whole lot, of several acres. Where there is the least moisture to prevent early work in the spring, or the successful growth of corn, ditch your land. You will be no more troubled after that.

Draining, then, is not only an improvement in the soil, which it is to the amount of a revolution—making the richest, the most productive land out of slough-holes—but, as we have said, and wish to repeat here emphatically, it fits your land from two to three weeks earlier in the spring sowing and plowing. The heaviest rains have but little effect upon it. There is the drain constantly at work—running clear water for you—for your stock in many cases—sometimes forming the only source of water for your stock.

Thus we have enumerated two beneficial results from draining. There is another—the power to withstand drouth. The soil will do that, though it seems to be just the reverse.—The reason is, the ground will be dryer and warmer than ever before, thus bringing into action principles that were held inactive by the moisture, because cold, and sour, &c. These corrected, the soil at once becomes warmer, and richer, and more porous, therefore more friable, and capable, not only of letting off the water (which it could not do heretofore), but retaining moisture, not standing water, dead water in the soil, acid, a lack of nitrogen—but the pure, sweet moisture, favorable to growth and a healthfulness of the soil.

Has the reader now an idea of draining, as gathered from this article? If not, let him read it over, for the matter herein contained is matter that we have thoroughly demonstrated. There is no theory in it. Trust us, reader, if you have wet soil, and have never ditched any. Do not neglect it. Try first on a small scale, if you are incredulous, and note carefully the difference; see how much earlier you can work your land in the spring, and how much better it will withstand the heavy drouth, that cracks your now wet soil; and, most of all, see what excellent grain you will raise.

If you have no tile, no stone, take boards, slabs, anything, that will drain your soil. Anything will do for an experiment. When that is done, you will be secure for thorough draining.

We have written much upon this subject; and we shall continue to write, as it is the most important of all farming operations. The difficulty is to begin. Begin—and begin carefully. Don't blunder, and then be discouraged. Make your drain carefully, according to directions; and don't think you know better—for even if you feel certain about a thing being different from the directions, you may depend *you* are wrong and the directions are right.—They are the result of a long and thorough experience—not of one man, but of the country and of the world.

HOW TO SHOCK CORN.

Get a piece of thick plank, 6 by 15 inches long; bore an inch auger hole in each end, and a three inch hole in the centre. Tie the plow line fast in one end; then make a grind-stone crank with an axle 3½ feet long—sharpen one end of the crank. All told. Place this plank against the shock at the proper place to tie the shock; the second boy will run round with the rope—put it through the hole in the other end of the plank—hitch to the axle and wind up tight, and tie with a corn stalk—all done in five minutes—with rope and crank on to the next. A shock put up sixteen hills square, around 4 hills, tied at the top in this way, never fails; and tied very tight, it keeps rain out most effectually.

After seeing this plan adopted—as it ought to be—any man who will then set up stalks with cross sticks, ought to be taken care of. This is the New York plan. CORNPLANTER.

La Guardo, Aug. 8.

THE AILANTHUS SILKWORM.

We regret to learn, and announce, after the glowing and promising accounts given in Agricultural Reports of the Patent Office of 1861-2, that the successful and profitable rearing of the celebrated "Ailanthus Silkworm," both in France and our own country, has thus far proved a failure, and that, in all probability, the race has already become extinct in both countries, and its "*education*," as the French savans *happily* call it, has, for some cause or other, not been successful — whether by the fault of the "educators," or the obstinacy of the pupils, we have not satisfactorily ascertained.

From the interesting and hopeful reports given by the Department, and being favorably impressed, with others of our readers, we made an effort to procure the eggs, cocoons, or worms —hoping to add a great source of wealth, employment and profit to our readers and the West, and turn the Ailanthus, or Tree of Heaven, to practical and lucrative purpose. We learn to our regret, however, both from the Department and the authors, that the enterprise is probably a failure, and the promised realizations rather "Frenchy." Attention is now being turned to a silkworm that feeds upon oak, with considerable promise, and experiments are being made with it, which, if successful, we shall be happy to announce in due time.

How to Guard Against Drouth.

The drouth, the past season, has taught us a useful lesson. We have taken our friends into the field, to show them by actual examination, the effects of a mellow soil—not only mellow, but kept worked, mellow. A mellow soil, let alone, will do something in a drouth. This may be witnessed in clover fields and where grain is sown. Try a clover field of but one or two years' seeding, and then examine an old turf. You will at once see the difference, and be surprised at it. After a rain of four days—a slow, soaking rain—supervening on a long drouth—we examined a lot containing two specimens of soil, in treatment—the soil being the same. Two crops of clover were taken from one part last year, and one this year. The other has been in grass for many years—is an old orchard—while the first is a young orchard. We thrust the spade at one thrust into the one, the clover soil, as mellow and soft, and as fine as we ever saw soil of any kind. (Rain seems to improve soil, when it thoroughly soaks it in a drouth.) The moisture extended down to the old moisture. But the other: we struck the spade several inches into the ground, with a hard, grating sound. One inch had been moist; in a few places a little more; in some less. The rest was dry for the space of a foot and a half, barely moist enough to keep a straggling life of vegetation. And this was all one soil.

Why this difference; and why so dry in so much rain?—two particulars of great interest. It is explained in this way—and let each one take it to heart. The one soil—the dry—was old and COMPACT—in a word, was hard. As it dried, it cracked, the drouth making it still harder—and the cracks drying it the more—drying it rapidly as far as the cracks extended, made it still harder and dryer. But most of all, the soil being hard, compact, prevented the attraction (capillary) which pulverized soil possesses. Let this then be borne in mind—that *a pulverized or mellow soil has an attraction for water*—on a mechanical principle, as a wick has in drawing up the oil of a candle. This is the great secret of success in a mellow soil to withstand drouth. In sward, the ground is not always loose, especially when clay is one of its component parts. It is somewhat different with a sandy, vegetable mold—with a thorough rich soil, entirely different. Such ground will withstand anything if well drained—excessive rain as well as drouth. Manure makes mellow —bear this always in mind.

We took our friends into the corn-field—a soil that had been well stirred with the cultivator, the corn being planted on sod turned down in the fall. It was an old sod, and the ground was fertile. In any part of the field, by removing the soil one inch in depth, it was found moist—sufficiently moist for the purposes of good growth. It surprised our incredulous friends. A piece of oats, also excellent in growth, exhibited cracks somewhat in the soil. This soil could not be stirred—it was drier than the corn ground. The corn was a most excellent, advanced crop. Just a sprinkling of rain moistening the top, and all was moist.

We have thus made many converts, by just seeing the thing. There is little need of mulching: you need but keep a mellow top-soil.

Topers will drink, whether hurtful or unhurtful. Farmers (*some*) will fall plow, wet or dry. We don't know which is worst. The one helps a man to degradation; the other aids a farm to degradation. The first glass has no suspicion. A little wet plowing especially in the fall has none. And so the evil grows.

CURING HAMS AND SIDES.

I trim the hams and shoulders in the usual way, except that I cut the leg off close to the ham and shoulder, to have them pack close, and as being worthless smoked; then sprinkle a little fine salt on the bottom of a sweet cask, and pack down the hams and shoulders promiscuously, as they will best pack in, and sprinkle a little fine salt on each laying—just enough to make it show white; then heat a kettle of water and put in salt, and stir well until it will bear up a good sized potato, between the size of a quarter and half dollar; boil and skim the brine, and pour it on the hams boiling hot, and cover them all over one or two inches deep with the brine, having put a stone on the meat to keep it down. I sometimes use saltpetre, and sometimes do not; consider it useless except to color the meat. I now use my judgment as to the time to take them out of the brine. If the hams are small they will cure in three weeks; if large, say five weeks; again, if the meat is packed loose, it will take more brine to cover it, consequently more salt will penetrate the meat in a given time than if it is packed close; on this account, it is useless to weigh the meat and salt for the brine, as the meat must be covered with the brine, let it take more or less. Leave the casks uncovered till cool. When the hams have been in brine long enough, I take them out and leave them in the cellar, if the weather is not suitable to smoke them. I consider clean corn cobs better for smoking meat than anything I have ever tried, and now use nothing else. Continue the smoke until it penetrates the meat, or the skin becomes a dark cherry brown. I then wrap the pieces I wish to keep, in paper, anytime before the bugs or flies have deposited their eggs on them, and pack them down in casks with dry ashes, in the cellar, where both hams and shoulders will keep as good as when packed through the summer or year. Cured in this way, it is hard to distinguish between the shoulder and ham when boiled. A large ham will often taint in the middle before cold salt or brine will penetrate through.—[*Ex.*

If you sow worms, you will get worms—if you sow thistles, you will get thistles—and woe if you sow the Canada thistle! If you sow clean seed, and have, luckily, a clean farm, you are a wise and a happy man. So looks a clean, well-dressed lady—your wife, I will guarantee, and your children. Sow not wormy or noxious seed.

SOD AS MANURE.

Stubble-soil is very well, as it is very mellow and uniform throughout; that is always if the land is properly tilled—not worked too wet.

But it does not produce the yield that an inverted sod does. The heaviest crops are obtained in this way. The sod should always, if possible, be plowed deep: this brings the mellow soil to the top. But the soil is raw, and must be tempered by the sun, or by the frost—or, better, by both. This raw ground is somewhat like unrotten manure; and, indeed, there is undecomposed matter in it. The hot sun and the frost will burn and freeze this all right; and this is the only thing that will do it.

This then prepares the upper ground for the crop which is to follow—puts it in order. If plowed a little deeper than usual, wild, unworked soil, will be brought to light for the first time, and the new, unused elements of fertility will be prepared and brought into use. In this way not only a good start will be given the crop, but the soil will be so much improved for other and succeeding crops.

By the time the roots reach the sward, which is turned down, it will be rotten, or in a state of decomposition. This action of the sod seems the most beneficial of all. The ground, by it, is warmed below—a sort of hot-bed—and the new manure formed, feeds the roots, so that between the sun and the warmth of the action below, there is a growth which cannot be acquired without the sod. That fermentation aids the growth, especially of corn, is seen from the fact that sod turned down in the fall, somewhat early, has less effect upon the crop. See how roots thrive on such soil! At first, not so well, owing to the top soil not being sufficiently prepared—for the sun *must* have its action on such soil.

Grain does less well; and so with grass—because the roots do not penetrate. In some of the grains, however, we see the effect—where the roots reach the sward. For the grains there may be less depth of plowing, providing there is enough mellow top-soil. But for corn, for roots, for hops, and for clover and other deep-rooting plants, the deep, inverted sod is the thing. This we have so thoroughly tried for years, that theory is wholly out of the question.

Sod improves the soil, as it derives strength from the atmosphere: even a meadow does this. The net-work of roots, especially where clover has stood, forms the most perfectly-adapted food for plants that can be appropriated to

them. There is nothing so good for the soil as what we return to it, what it once raised. We are aware that the same elements are all there. The sward, like the green crop turned in, is among the very best of manures.

Besides all this, such sod, inverted, prepares the soil for future use, and has a mellowing influence upon it, and is among the very best things for seeding: manure ready to hand at the top. How beautifully the harrow will prepare such ground! how rich and mellow it is!

PRESERVING EGGS.

Since the "hen-persuader" has failed in its object, and fowls cannot be prevailed on to lay eggs all the year round, it is advisable for those who are fond of eggs to preserve them in seasons when they are plenty. However close and compact the shell of an egg may appear to be, it is nevertheless full of minute holes and pores invisible to the naked eye. The effect of these holes is apparent in the decrease of the moisture of the egg, and the subsequent change in the contents occasioned by contact with the air. "As full as an egg is of meat," is an old saying, but in all stale eggs there is a vacancy proportioned to the loss they have sustained by evaporation. If the end of a fresh egg be applied to the tongue, it feels cold, but in an addled egg it feels warm, because the albumen of the egg being in contact with the shell absorbs heat from the tongue more rapidly than the air-bubble in the fresh egg. If the pores of the egg-shell be kept closed, the contents must be preserved intact, as no change can occur, and the object is to close this atmospheric connection in the cheapest and simplest manner. Any kind of varnish will answer the purpose in one sense, but will defeat it in another; as eggs, being particularly affected by strong scents, would loose their delicate flavor by the odor of the coating. A better plan would be to employ beef suet or mutton tallow, provided the egg can be kept in a cool place. The eggs should be dipped in the fat and afterward wiped off, as any excess of grease over that required to fill the pores, would become rancid. After this, the egg should be set perpendicularly, with the small end uppermost, and placed in a box filled with bran and tightly covered up. If the egg is laid on its side, the yolk will adhere to the shell. Charcoal finely pulverized is a good substitute for bran, as it is a deodorizer and will absorb any disagreeable effect that might be perceived from the grease. Some dealers are said to practice dipping their eggs in dilute sulphuric acid. This is a feasible plan, chemically, as the action of the acid on the chalky shell would deposit sulphate of lime in the pores and thus close the connection. Strong vinegar would doubtless answer as well as vitriol. Eggs acquire an unpleasant odor by coming in contact with strong smelling substances, such as mahogany saw-dust, lime water and musty straw; and the greatest care should be observed in having the materials used each excellent after its kind. It is a common practice to preserve eggs in lime, but they are at best doubtful when so kept, and cannot be praised. An egg is very much like a razor—either excellent, or good for nothing; and those who preserve eggs for market, would do well to give the abovementioned recipes a trial.

The Hay Crop with a View to Harvest.

All Timothy needs all harvesting at one time; and this cannot be done. The first must be harvested greener, the last riper. Now, if there is a difference between green hay and ripe hay, there must be a loss to the farmer to harvest in this way. So with clover; so with grain. What, then, are we to do? We answer, what is done with the different grains.—Have your grass mature at different periods, as barley may be harvested sooner than oats, and oats sooner than buckwheat. This timing the grains, is one of the cares of the farmer; you don't see his harvest all fall upon him at once. It is needless to say how he suffers in such case—what grain he loses—how his straw deteriorates—what anguish and toil he endures! A little thinking will prevent all this.

But how much more important is it to apply the principle to hay! a crop that is so extensive as a single crop of the farm. Here is the great difficulty: we lose by getting our hay too ripe towards the close of haying. Now, it is easy to remedy this, as to avoid it in grain.—Use the different grasses and clover—especially the earlier and later. We need not instance the particular kinds, as these vary in profit and other advantages in the different localities. The early and late clovers alone, give a great advantage in harvesting. Sometimes only one is advisable to use. Then grass must go with it. Timothy is neither early nor late—rather late, however. The reader will bring to mind other and earlier grasses. In this way, every grass and clover can be harvested to the best advantage. In other words, the farmer can make his hay crop, though a mammoth one, virtually a small one, as small as is the amount of each grass. To be sure he has the same amount of hay—has several hay harvests. It is after all—and most beautifully!—a whole crop harvested, each in rotation, all green and fresh, the last as tender as the first.

This is one of the most important things in harvesting; but, like the great majority of farming, is neglected—in most cases is perhaps not thought of. The reader of this article, at least will not have this excuse.

Multiply the kinds of grasses, if grass you prefer to clover. We are glad to see an im-

provement in this respect. How many soils that we have would feed advantageously some new grass—a grass that is a great success in other places—but is unknown here, and, yet, may do equally well here.

We want nothing better for our own use than June clover and Timothy—the clover cut twice, thus giving us three hay harvests. We have the best of success in this way, especially with the clover. But all localities are not alike.

Reliance upon one kind, where much hay is used, will not do. There must be breaks to give chance for maturing—for it is a delicate operation to harvest hay—nothing to harvest ripe, woody fibre, which is not hay, and is starving so much our cattle. Tender as grass is must it be hay in the barn. The summer is transferred to winter.

AMBER WHEAT.

Any farmer who has good, clean, well-grown, Mediterranean wheat, has a fair amber wheat.

Wheat may be divided into three kinds, if we take color as a standard, namely—White, Amber, and Red. The white wheat contains a number of varieties, and is well known by its color in a commercial point of view. The berry is expected to be of a clean, creamy whitish, or rather lightish yellow color, opaque, and the larger the berry, the higher esteemed is the wheat, when it is perfect, and has few light, small, imperfect kernels.

The Detroit Board of Trade during the past two years has divided the varieties of wheat coming into market into: White, No. 1—White, No. 2—Amber, No. 1—Amber, No. 2, and rejected. They have discarded Red wheat altogether. Originally, when it was found that we could not grow in some districts white wheat, coarser varieties were resorted to, and they all passed under the name of red in a few years.—The wheats we grew, however, were not true red wheats at all. They were amber wheats—and one of the finest and most beautiful of the amber varieties, is the wheat so well known in this State as the Blue-stem. The berry of this wheat is not white, it is translucent or semi-transparent, darker in shade than white, but clear, and of that peculiar light, crystalline clearness, and subdued color between white and red, that likens it to amber and gives it its name. Besides the Blue-stem, nearly all the Italian varieties of wheat are of this description. The Tuscany and the Mediterranean are amber wheats. So is the Australian. The Hunter and the Hopetown wheats of England belong to the class of amber wheats, but they are not grown this side of the Atlantic. The amber wheats are esteemed as making a strong flour, and one from which the bakers can make a greater weight of bread than they can from a flour from other kinds of wheat, there being more gluten and less starch in its composition.

True red wheats are rarely grown in this State. The color of the berry is generally a deep reddish yellow, the skin thick and opaque, the quantity of bran in proportion to the flour is much larger than from either the white or amber varieties.

Some of the spring wheats are amber, and some are red, and many are mixed amber and red. The Mediterranean wheat, from its ability to resist the wheat fly, has been much grown by farmers in the eastern sections of Michigan for the past eight or ten years, and when first produced was considered a very inferior mongrel amber and red variety, going under the name of red wheat. During the time it has been cultivated in this State, it has improved very much in quality, and has at last taken more of the amber than the red character. It might have been much more improved than it is if any pains had been taken with it by selecting only the best and ripest and most highly-developed heads, but no care has ever been bestowed upon it in any way, and it owes its improvement solely to the action of the soil and the climate upon it. These elements have ameliorated it, and rendered it of a better color, and of much higher quality, as miller's wheat, than it was when first grown in this State. It is by no means as beautiful or as perfect a wheat, either in character or color, as the Blue-stem, but it will yield a crop where the Blue-stem would be eaten by the wheat midge. Nevertheless, we have an abiding faith that it is only the indolent and un-energetic farmers that resort to the less valuable wheat. Those who have recourse to manure and keep up the high condition of their land, grow white wheat as well as they have ever done.—[*Michigan Western Rural.*

To educate, repetition is necessary. To educate the farmer, we must repeat often what we have said—and this we are doing.

Harvest should be so arranged as never to hurry. By this it will be seen how much too much work the farmer has. In this country we work too much—that is, labor is out of proportion to thinking.

The Drouth in California.

We gather, from private advices, that the drouth in California is as severe as here.—Along the coast line, in the neighborhood of San Francisco, there has no rain fallen for nine months. Everything is dried up, either dead or nearly so. Grass has long since failed. Cattle are disposed of, or die. In one place the Indians were called for to pull the barley, so as to get all the stalk and the root. Leaves are dried on the trees. The trees themselves are parched.

The climate of California is naturally much warmer than here; the heat extends through the greater part of the year. But, to aggravate the matter, last winter but little snow fell, and so the streams, which issue from the mountains, have not their usual supply of water—and hence the means of irrigation are cut off. People depend upon these streams for the moisture of their ground. Irrigation is the grand resort in many parts of California.

The drouth thus affects more or less the whole country. We shall probably have a superabundance of snow and rain the coming winter; and some people, anticipating this, are preparing accordingly. And this is just as it should be. There can be no harm in preparing for a long, severe winter. If not severe, so much the more fodder to keep well the latter part of the season, the most important can be used to the benefit of stock.

DISINFECTANTS.

Common copperas is perhaps one of the most efficient and economical disinfecting agents known. If two pounds be dissolved in ten quarts of water, and the solution poured into gutters, sinks, cesspools, and other places where filth necessarily accumulates, its deodorizing power will become speedily and convincingly apparent. I advise every housekeeper to provide a quantity of the article, and keep it constantly on hand, to be used when wanted. The unpleasant odor emanating from the barnyard, and other places where manure is stored or kept during the hot weather ordinarily experienced during the vernal and summer months, is speedily neutralized by a slight sprinkling of this solution, as well as the extremely unpleasant smell engendered by decaying animal and vegetable substances in cellars and out-houses, and which it is frequently found difficult to prevent. Copperas is also an excellent manure. It acts as an absorbent and fixer of the gaseous and volatile products of decomposion, and thus becomes an efficient medium of their transportation to the field where they are required to give energy to vegetable life.

And here permit me to mention a few other important facts in connection with this subject. Sulphuric acid, which, like copperas, may be obtained of the druggists in any desired quantity, is also a most desirable article for this purpose. If used in a diluted state, and sprinkled over the floors of stables and other buildings where animals are kept, it will, in a short time, disinfect the same of all nauseous and unpleasant odors, and render the atmosphere perfectly pure and sweet. Like copperas, it is also a good manure.

Another article of great efficiency, is found by slacking quick-lime to a thick, plastic mush consistency, with water saturated with salt.—This is what may properly be called domestic chloride of lime, being in every respect similar to, if not strictly identical with, the chloride of lime found at the shops, although it comes at less than one-twentieth the cost.

Salt in Curing Hay.—Salt is still used by many in curing their hay, when a wet season gives them the excuse. When little is required to save the hay, as when it needs but little more curing, there may be no harm in applying the salt. But the thing is denounced by the best agriculturists. Hay *can* be cured without salt. But why not salt hay as well as anything else? We answer by asking another question. Why not eat salted meat or fish with all the salt in it? You will answer, Because it is too salt. That is precisely the case with hay. You cannot soak the salt out of your hay; but you feed it with all the saline property in it, and that is a great deal too much. This should be sufficient; but we have authorities against the excessive use of salt; we have the experience of many farmers and owners of horses. Salt will physic in large doses; it will scour when still larger; and kill in still greater excess.—Rather do without it at all, than to use it in too large doses. Salt should be used as a condiment, and not as food. Hay should be cured without it, unless in very small quantity; and then we deem it unnecessary.

The ground makes a very good compost heap to rot your manure. In the case of a fallow it can be done to a charm. Thus, some farmers, draw their long, green manure, with all the pungent liquid in it, on their land, plow it under, leave it there to rot and ferment, and help rot and ferment the sod, the soil holding all the strength. The heat, which is abundant at that time, will reach away down to the deepest plowing. In such a way, you will get all the strength of your manure, and your soil improved by the action (chemical) of the manure.—Particularly is clay benefitted in this way.

Buckwheat, frost, and sun, combined, have a good influence on soil hurt by wet plowing.

WINTER MULCH.

Snow is a good covering for fields. But sometimes it falls too heavy; and sometimes it lies too long. Snow is a protection to grass and grain. This is readily seen where snow lies longest. As the drifts disappear in spring, so the green circle of grass appears. But the ground is left packed; and though the grass does well from the early start it gets, it does not so well as if the snow was less heavy.

Sometimes, however, there is a little snow during the season, and the ground is laid open to the blasts of winter. In such a case, there are still means provided—*provided* we use them. They are not done by winter's hands, but must be done by our hands. We have seen the evidence of this, more particularly the past spring, which leads us to the present remarks. Manure, applied in the fall, is a better mulch than snow—better, because it does not pack, but, on the other hand, mellows the soil, and prepares it further for a summer mulch. The manure is a protection against the severity of the frost and the severe winds, with their lifting tendency. Then there is the virtue of the manure, which, in itself, is a counteracting influence against the cold. The ingredients of manure will not freeze as readily as water. This is an important point, we believe, too much overlooked.

Then there is another mulch for winter—grass. This, we are glad to see, is getting to be understood. Farmers, without being told so, have learned this, many without knowing the cause of the benefit. It is because it is a protection, and answers much as manure does, for that is what it is in the end. The tender grass is protected by itself. The soil is enriched and protected.

"But, manure, if you apply that, will escape—that is, the strength, during winter. The rains of spring and autumn will surely do that. My learned friends tell me so, and it looks reasonable."

So it does—or, at least, so it has. But this is a fallacy. The thing has been sufficiently tried to prove it. It has been tried by the scientific and unscientific; very few intelligent men object to top-dressing with manure. Even where the manure is to be plowed in, it is best to leave it spread on the ground awhile—several weeks at least, and let the sun and rain have their effect. As the gases are let loose, the earth attracts them, being in contact with them. But this is necessary—that the manure be spread evenly and finely, so as to get *close to the earth*, else it is of little benefit. This is common experience. And because the latter mode of top dressing is not always successful, the farmer is discouraged. Let him apply his manure when the strength is yet in it, and mould it, so to speak, to the earth, and he has a covering, just what is wanted, for winter, and summer too; and the rain and sun but help make the coat more successful.

Apply, then, early in the fall, any and all kinds of manure, even if raw and undecomposed. Take pains and spread finely, so that the coat becomes, as it were, part of the soil, so close to it, and all the strength will surely go into the soil, and get up a growth—an additional mulch of grass or grain for winter. F.G.

Gapes.—The poor chicks! how many a pang has been felt for them!—but to no use—they must go; and the thought that a nasty worm chokes them to death, is horrible indeed. But there is a remedy—not a new one—all the better for that; but it may be new to many of our readers. At least, here it is: The gapes are caused by a worm, from a quarter of an inch to an inch in length, which is found in the throat or windpipe of the chick. Take a small feather and put it down the throat several times in succession, and the worms will be loosened and coughed up by the chicken. Sometimes the operation has to be repeated after a day or two. This worm is a grub, hatched from an egg which is laid in the nostrils of the chicken by a fly. Cleanliness is said to be a preventive. Doubtful—though possible.

Let the farmer who has rather a poorish soil, sow buckwheat on it—or as much as he can prepare and wishes to sow to winter-grain; and let him not be afraid he will work his soil too much, get it too mellow for the grain. This turn under, when in blossom, for winter grain. You will get doubly paid for your labor. A little top-dressing of the buckwheat with the fertilizers, will improve considerably the crop.

It is a beautiful sight to see men put up grass properly, and harvest it in that pale green excellent condition, that makes such fragrant hay. There is a *smack* about it—you almost enjoy in anticipation the stock's delight. And then you have the consciousness of having it done properly, to say nothing of the immense benefit.—Here is a little of the practical to aid us in the practical. It is what is needed in life—the practical with the practical.

Agricultural Items.

THE PROTECTION AGAINST DROUTH.—The earth is the great fountain of moisture. All our rains come from that source. And when we have a drouth, the moisture is still there, extending deep down, where there are fountains and moisture of the soil. Here is the grand source of supply, not only to wells, but to our crops. But how will you get it there, if it doesn't rain—how will you get it to our crops? The question is a fair one and easily answered. Extend tubes down to the moisture—fine tubes. "Fine tubes?" Yes. But how? Moisture is drawn up by what is called capillary attraction—that is, by the porousness of the soil—by its being mellow and loose. A hard, baked soil, will not permit any moisture to be drawn up. The remedy, then, is, break your soil up and make it fine—break it up till down into the moisture, and then you will get it to the top. The more you stir it, the more moist you will get it, because the more chance for the moisture to be attracted up.

THE CHEAPEST FILTER.—A French paper says: "It is known that charcoal is the most efficacious substance that can be employed for the purification of liquids; foul and stagnant waters containing decaying animal carcasses have been purified to the extent of becoming inodorous, potable and healthy. Here is a method of constructing one of these filters in the easiest manner. Take a flower pot, or any other vase, having a hole in the bottom, fill the bottom with large, round pebbles, then cover with smaller pebbles, then with coarse sand or fine gravel, and finally with about four inches of pounded charcoal. The coal may be placed in a bag and broken with a mallet or hammer.—It should be sifted, and the very finest dust thrown away."

Our cotemporary adds that nothing is necessary above the charcoal, but we should suppose that it ought to be covered with a clean flannel, held down by stones on the corners. The charcoal should be freshly burned and renewed occasionally. The other parts will of course last indefinitely.

STEEP FOR SEED WHEAT.—A foreign journal recommends the following: "A very excellent steep is to make a brine of salt and water strong enough to float an egg, and to as much of this as will cover a barrel of wheat in a tub add one half pound of blue-stone. In it steep and well wash the wheat for 36 or 48 hours, then strain in a sieve over the tub till all the brine is drained off, and mix as much dry, finely slacked lime as will dry it thoroughly."

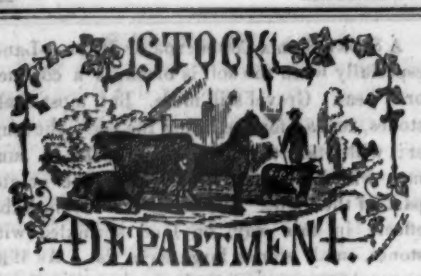
A STONY SOIL A CONDUCTOR OF HEAT.—Land, especially when the soil is black, is a conductor of heat. Gravel still more. But, most of all, stones, rocks—for the larger the body, the longer it will retain the heat. Thus rocks, in summer will keep their heat during the greater part of the night. We have seen remarkable effects in this way, on land sprinkled with stones, small stones large as a fist. As if an unusual force was at work; and so it was—an unusual amount of heat, driving the corn and the grain. In grass, of course, it will not do. We have known people draw stones upon their land, and scatter them as one would manure; and remove again to other fields. It was interesting to see heavy crops grow seemingly out of the stones—the stones white and the grain dark. Particularly is it good for corn. This thing has been done most successfully on the Mohawk flats in York State. It seemed impossible for the cultivator to find its way through the stones. But it swam through—rattling as it went—the corn thriving, the grass not encouraged. It was laborious, you would say—but it was profitable.

Less land will give more chance for work. It will cover the bare spots on your farm; your naked hill-side; which is an improvement, not only to your pocket and your farm, but to the appearance of the landscape. We have already instanced how this may be done. Top dress with compost manure; sow peas; and plow under when in full blossom. Then raise a crop and seed down. Perhaps the second coat of manure is wanted (on your hill-sides); or, for your hill-sides, sow clover; cover lightly with straw—just cover—and then top-strew with rotten manure. Unless a freshet should immediately wash all away, you will stand a good chance to form a sod. That will give you a hold. This we have seen tried, and it is a fine thing.

There is a drouth of three weeks, and the hay has long since needed cutting. At last it is cut. A small rain comes—just enough to spoil it—and then drouth again—luckless farmer!

If you have no time—positively no time—to rot your muck or make it into a compost heap, draw it on your meadows or pastures fresh from the pit. We have seen this done to positive advantage, and have had it confirmed by others. Apply in the fall early, and spread at once.

It is said that boiling coal-tar with slaked lime, will make a shining surface on wood work and walls of any kind, which is as imperishable as stone, and is therefore valuable for out-houses, &c. Give your stables and fences a coat.



ALDERNEY COWS.

Little Alderney cows—you would take them for deer, so unlike other cows is their shape. Gentle little cows, that seem more like heifers than grown cattle—and they are ingenious withal. So large-tender-eyed, you would see at once by their looks that here is something to have—in the family. There is no cow so gentle, so small, so actively good, large-hearted, reminding you almost of a lamb. Their milk is the richest that is drawn from cows—and the yellowest, making golden butter, and as rich in flavor as in color. What cream is here produced! we mean milk, for the milk is almost like other cream. The wealthy and privileged keep these cows (generally one or two) for their milk and cream, and the excellent butter they make—privileged butter, like the privileged tea of the Celestial family.

"But why are not the cows introduced here? why not more adopted—scattered throughout the country?"

Simply because they are of an inferior size and form. They are not handsome—though very gentle and domestic in their habits. We however say, "handsome is that handsome does." But the little Alderney cows (Jersey cattle) are here and there seen; they are beginning to attract attention. No doubt their day is coming, as was that of the Durham and other breeds. We see evidences (of the Alderney) in our "native" breed; we have owned such ourselves, and can testify to their excellent qualities. F.G.

Avoid the old-fashioned breast collar for horses. It seems natural to have them to plow with; but it only seems so. The breast is not so firm as the shoulder; and the Dutch collar will choke your horse—choke it down frequently we have seen—and we will own it has happened in our hands. If made large, which will somewhat prevent choking, it will chafe, and soon make the breast sore. It is unnatural to put such a collar on the breast of a horse. The shoulder is the place of power. And the hame is the thing to put there.

IMPROVEMENT OF STOCK.

Every tolerably smart man ought to know by this time that there is a good deal of difference between good and bad. Take it where you will this holds true—the best and the worst are a good ways apart.

Cattle form no exception to the rule. Give them the same chance, and one bullock will be good beef in July, and another will be "spring poor" in September. One sheep will shear eight pounds of wool, while another that has consumed more feed will shear only four. One horse will draw two tons, while another can't be depended on for half a ton. One pig will be fat and another poor with the same keep. One cow will furnish two hundred and fifty pounds of butter for market in a season, besides supplying milk and cream for a large family, while another will put the family on short allowance and do nothing at all for mankind at large—there's the difference, and yet multitudes don't seem to see it. They go on breeding as though the only object was to get something with head and heels, no matter what.

The facilities for improvement are unbounded. The service of male animals can always be obtained from families of marked excellence at reasonable prices.

By cheating and grooming and puffing, some particular animals command fabulous prices—but the same blood and the same merit, may always be got low enough if breeders will only look for it. Every cross you make brings you about half way from where you are, to the top of the heap—always provided that you cross discreetly with the best. Who, then, will be content to stay at the bottom?

Any man who raises an inferior animal, when a little cost and trouble would make it a superior animal, ought to be rode on a rail. I am not encouraging Lynch Law—I pronounce that decision as a Justice of the Peace. It is a matter that belongs to unborn generations, who are blessed by every improvement of the race of domestic animals, and cursed by every transmitted defect. We are here to mend and not to mar, and the man who passes over to posterity constitutional defects that he might remedy, is a bad patriot, a bad Christian, and a bad husbandman.

Use no sire but of the first class. And mark what I say—throughout all your flocks and herds put every really good female to breeding. The practice of letting the nicest heifers and ewes go to the butcher, and the best mares to the market, is a gross abuse of our privileges—

an outrageous perversion of Providential favors to unworthy ends. First class animals should be solemnly set aside for the increase of their species. That is their special mission on earth. Used in that way, their progeny may eventually supplant all inferior animals, a gradual improvement be effected, and a higher standard reached from year to year throughout all ages. The time may even come when sheep will shear as much as peddlers and puffers are now telling of, and premium cows actually do what we read of. It may not as a general thing pay to raise a calf, yet, if a man has a very superior cow, he has no moral right to count the cost or trouble, but he should cross her with the best he can obtain, and save her heifer calves, as a faithful steward put in charge of a treasure to preserve and transmit. "Like produces like," is a motto in breeding; and yet many of the very best cows fall into hands so utterly demoralized that their progeny are "deaconed" the fourth day, or they are crossed with what is perfectly worthless, and so their calves are not fit to be raised. The cow and the bull should both be of a good milking family, and have every other possible perfection.

It is still worse with horses. The fleetest, the strongest, and handsomest, are put to other services than breeding. Every filly of unusual promise is at once secured by some fancy horseman, and her life is sacrificed at their fancy's pleasure.

The other day an intelligent and wealthy farmer invited me to his stables to see a magnificent farm team, six years old, well matched, large, powerful, and faultless in their proportions. "You intend these for breeding," said I. "No, I can't spare them for that: I work them on my farm." I rebuked him with emphasis, telling him if they were put to breeding during his life-time, their descendants might be remembered by scores and even hundreds, as good or better than they, and so the world be indebted to him for a superior class of horses. Whoever has a faultless mare, and doesn't retain her for breeding, is short-sighted and foolish. Too much American stock is a jumble of sorts, and often a fine looking animal may have been badly bred, and upon trial would prove a good breeder; of course, then, she may be otherwise used. But let excellent animals be tested, and in all cases beware of crossing animals that are essentially dissimilar.

Powerful mares should never be bred to light animals. Above all things, there is wanted some 1,200 lbs. horses, with perfect style and action, docile and hardy—and having such a model, let nothing but that precise type be crossed with them—breeding bays with bays, and blacks with blacks, till a uniformity is secured, as in Devon cattle and Southdown sheep. Now, let every man try to raise a superior animal of some kind.—[*Rural New Yorker.*

SHOEING HORSES.

W. Jones, a veterinary surgeon of London, gives the following simple rules for shoeing horses:

1. After having taken off the old shoes, shorten the toe, and remove all the dead and loose parts of the hoof. Do not cut the sole or pare the frog, except when the foot has received any injury from a nail or otherwise, when it must be cut out.

2. Let the shoe be of equal thickness, or rather thinner at the heel. The ground and foot surface should be perfectly level. The shoe should be light on the heel. Too many nails are objectionable, and these should be kept as far as possible from the heels.

3. For the hind feet there is no objection to calkins, though they are of doubtful benefit. Horses travel much better without them. The hind shoes are made thicker at the toes than at the quarters; the nails also can be put closer to the heels without causing inconvenience.

4. Side clips should be avoided; they destroy the hoof; this is the case when nails are too close together. The feet should never be rasped, as it destroys the enamel of the hoof, renders them brittle, and causes sandcrack, and consequently lameness.

5. Expansions is a fatal error which has led to many abuses in shoeing, such as paring off the sole and frog, rasping off the hoof, &c. The elasticity of the foot, which is, however, very limited, exists only in the upper part of the hoof, principally round the carnet. On the lower part and the toe it is *nil.*

To Cure Scratches.—Feed Glauber or Epsom salts two or three times per day in feed—a small handful or large tablespoonful. Keep heels cleaned with soft soap and warm water.—After feeding salts awhile, apply a wash composed as follows: 1 quart alcohol, 1 ounce each of blue vitriol, copperas, aloes and gum camphor, put together. This wash will keep calks from shoes from being sore, and is first-rate on any flesh-wound of horse flesh, and of men too. Some put in verdigris, but I never have. This I give from experience, after doctoring a horse with everything, and after every one's "sure cure's, &c., for two winters and springs."

ITCH OR SCAB ON SHEEP.

Scab, itch, erysipelas, &c., all come under the head of cutaneous diseases, and require nearly the same general treatment. The following compound may be depended on as a safe and efficient remedy in either of the above diseases.

Sulphur, - -	2 oz.
Powdered Sassafras,	1 oz.

Honey, sufficient to amalgamate the above. Dose, a tablespoonful every morning. To prevent the sheep from rubbing themselves, apply

Pyroligneous acid, -	1 gill.
Water, - -	1 quart.

Mix, and wet the parts with a sponge.

Whenever the scab makes its appearance, the whole flock should be examined, and every one having the least abrasion or eruption of the skin should be put under medical treatment.

In most cases, itch is the result of infection. A single sheep infected with it is sufficient to infect a whole flock. If a few applications of the pyroligneous wash, aided by the medicine, are not sufficient to remove the malady, then recourse must be had to the following:

Fir Balsam, -	½ pint.
Sulphur, - -	1 oz.

Mix. Anoint the sores daily.

The only additional treatment necessary in erysipelas, is to give a bountiful supply of tea made of lemon balm, sweetened with honey.—[*Dr. Dadd.*

Ten Rules for Making Butter.

In making good butter, there are several nice operations to be gone through with which require an eye to cleanliness, forethought and some little experience:

1. On milking clean, fast, yet gently, regularly twice a day, depends the success of the dairyman. Bad milkers should not be tolerated in a herd; better pay double price for good ones.

2. Straining is quite simple, but it should be borne in mind that two pans about half full each, will produce a greater amount of cream than the same milk in but one pan; the reason of this is the greater surface.

3. Scalding is quite an important feature in the way of making butter in cool weather; the cream rises much quicker, the milk keeps much longer, the butter is of a better color, and churns in one-half the time.

4. Skimming should always be done before the milk becomes loppered; otherwise much of the cream turns into whey and is lost.

5. Churning, whether by hand or otherwise, should occupy forty or fifty minutes.

6. Washing in cold, soft water is one of its preserving qualities, and should be continued until it shows no color of the milk by the use of the ladle. Very hard water is highly charged with lime, and must, in a measure, impart to it alkaline properties.

7. Salting is necessarily done with the best kind of ground salt; the quantity varies according to the state it is taken from the churn—if soft, more; if hard, less; always taking the taste as the surest guide.

8. First working after about twenty-four hours, is for the purpose of giving it greater compactness.

9. Second working takes place at time of packing, and when the butter has dissolved the salt, that the brine may be worked out.

10. Packing is done with the hands or with a butter mall; and when butter is put into wooden vessels, they should be soaked two or three days in strong brine before using. After each packing, cover the butter with a wet cloth, and put a layer of salt upon it; in this way the salt can easily be removed at any time by simply taking hold of the edges of the cloth.

Butter made in this way, will keep any length of time required.—[*Maryland Farmer.*

FATTENING SWINE.

Farmers begin to fatten swine too late. Some do not commence before the first of autumn, and others even later; the consequence is, the animal scarcely gets under way, when the time comes for slaughtering him. Our best managers make it a rule to keep the animal growing without intermission from the first period of its existence until ready for the pork tub. If kept over winter, they are fed and kept comfortable throughout, and the regular fattening process is commenced early in spring. A bushel of corn given thus early in the season to a vigorous growing animal, is worth much more than the same fed in autumn, and far more than if fed in cold weather or in winter. One reason that some farmers find it unprofitable to fatten pork is, that a large part of the process has to be performed when the weather has become so cold that much of the feed is required merely for sustaining animal warmth.

The best pork-raiser we know of has, in one instance, grown a pig eight months old so as to weigh about four hundred pounds; and in another, four hundred and fifty pounds in ten months. He has the corn ground to meal, and prepares it by pouring into a covered tub

four pails of boiling water to each heaping pail of dry meal. After standing a day or more, it all becomes nearly a solid mass, and makes excellent feed. The animals are kept perfectly clean, dry and comfortable (not in a close pen but in a small yard), are fed with great regularity, and never quite so much as they will eat, surfeit being carefully avoided. He finds that pork thus manufactured costs him only five cents a pound when corn is a dollar per bushel.

Farmers who have not begun to fatten their swine regularly, as they should have done months ago, should commence immediately.—By attending to the particulars just mentioned, they will find the business far more profitable than the too frequent practice of feeding in the ear, giving the feed irregularly both as to time and quantity, and paying no attention to cleanliness and comfort. The skilful farmer, whose practice we have already described, finds that the mixture of meal and hot water makes twice as much pork as corn fed on the cob, according to careful weighing and measuring.—[*Co. Gent.*

SHEEP WORK FOR SEPTEMBER.

The following from the *Rural New Yorker* will not be inappropriate for this month:

"The weaning of lambs should never be deferred beyond the first of September. Many leave their lambs (now to be called tegs after weaning) for a few days in the field where they have previously run with their dams—removing the latter. It is thought they are less restless when kept in a familiar place. It is better to separate the ewes and tegs so widely that they cannot hear each other's bleating. If this is impracticable, the fences which confine the latter should be carefully stopped to prevent them from crawling through to their dams. A teg that has once done this, is more difficult to confine afterwards.

There is a difference of opinion in England whether newly weaned tegs should be put on rested pastures—i.e., those which, after being knawed down are cleared of stock and allowed to spring up fresh—or on rowen (the second crop of grass on meadows), or on new seeded stubbles. So far as we have observed, the balance of opinion in England is in favor of the first course: in the United States, it is decidedly in favor of the two last. The difference in soil, climate and cultivation may, perhaps, call for different practices. It seems to be conceded, on all sides, that tegs should have fresh but not rank feed.

If tegs are well grown and in good condition, they require no special attention in September. If they are unusually small or thin, some careful shepherds begin, even thus early, to give them a little grain, and to shelter them from heavy storms.

Breeding ewes should be kept on rather short, dry feed, for a few days after weaning, to dry off their milk. As soon as this is effected, they should receive first-rate pasturage until winter, in order that they may recover their flesh and strength, be ready to take the ram, and ready to go properly into the winter.

Stock rams should also receive particular care, and if not in first-rate condition, they should immediately be fed grain daily until their working season is commenced and completed. For a young ram, or one unaccustomed to high feed, a pint of oats a day, or its equivalent in oats and corn, or oats and peas, is sufficient. It is better to divide the grain into a morning and evening feed. For an old ram accustomed to high feed and hard work, a quart of oats a day, or its equivalent, is not too much.

Young wethers, not to be turned off, and yearling ewes not to be put to ram, should, of course, receive as good feed as practicable, to promote growth—but if feed is scarce, we should give breeding ewes the preference.—Wethers that are to be turned off must receive prime pasturage."

CARE OF HORSES.

Of all the animals coming under our care, there are none requiring or deserving more especial attention than the horse—the "noble horse," as he is often styled; nor is there scarcely an animal possessed of his intelligence—nor one more willing to obey the wishes of his master, when they shall have been made known to him. Notwithstanding his intelligence, his tractability, and keen perception, he is the most of all animals abused. He is abused and often spoiled by blockheads in breaking. Abused by fast young men and thoughtless older ones, on the road and in the team. Abused and neglected in the stalls, by being fed with improper food at irregular times and in irregular quantities, and being compelled to make his bed, after a hard day's work, upon the soft side of a hemlock plank. Who wonders at the many wind-broken, spavined, maimed and crippled animals?—all the result of abuse.

Without going into full details as to how a horse should be managed, there are a few things which, if observed, will be conducive to their comfort and well being.

In the first place, they should be fed their breakfast, dinner and supper, as regularly as their masters are served.

The bridle-bit should be wound with cloth or leather, to prevent its sticking to the tongue and mouth in a frosty morning. Those who think this unnecessary, are requested to touch their tongues to an ax or some other iron surface when there is frost in it, and then they will be better prepared to appreciate the fitness of things.

After traveling sufficiently to produce a hurried respiration, or to induce perspiration, they should not be left to stand out of doors unblanketed.

In returning to the stable, let the card be used, which will answer the place, to a certain extent, of rolling, which they always like to do after exercising. Before going into the stall, the feet should be examined, and all ice or snow be removed—else it would melt in the stall and make the floor or bedding wet. When in the stall, well blanketed, with a good supper and a good bed, the fatigues of the day are soon forgotten, and with the morning comes spirit and strength for the task any reasonable master may require.—[*Ex.*

The following is from *Wilkes' Spirit of the Times*: "Is Rysdyk's Hambletonian a Great Grandson of Imported Messenger? *Dear Spirit:* A correspondent throws doubt upon the pedigree of Hambletonian, because of the age it makes his ancestors. The doubt is dissipated by the fact that Abdallah stood in this country at the time Hambletonian was got, and in the very town where he was reared and now stands. That there is nothing impossible in the pedigree is shown by the fact that there is an undoubted great-grand-daughter of Imp. Messenger now in this county, in full health and vigor—Roxana, jr., a thoroughbred mare, bred by Mr. Corbin, of Virginia, and for several years in the stud of Dr. Warfield of Kentucky. A grand-daughter of Imp. Messenger was owned in this county until two years ago, when she died. She was a daughter of Washington Grey, a son of Messenger, and was out of a mare by Imp. Diomed. She has left valuable produce. A daughter of hers has been bred to Hambletonian. The old horse is of good blood and he seems determined to keep up the reputation of the family. He was born with a good history, and he has been busy 'making history' ever since. G. *Newburg, N. Y.*

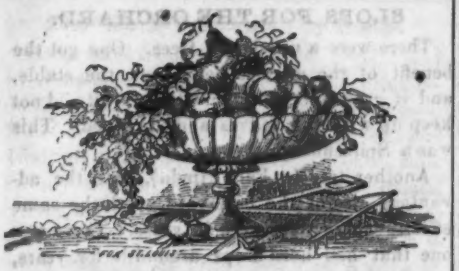
Oats as Food.—Oats are cooling to horses, and hence good for summer. Oats are also a valuable article for the table—used extensively among the hardy Scotch, and may be made a substitute for more expensive grains. The oat makes white, nutritious bread. Fear it not.

Scab in Sheep.—Professor Simonds, the most recent writer on the subject, recommends a liquid prepared as follows:

Take two ounces of arsenic and two ounces of carbonate of potash, and boil in a quart of water till dissolved, and then add water enough to make a gallon of the solution. To this add a gallon of vegetable infusion made by pouring a gallon of water over four ounces of foxglove leaves (*digitalis*) and allowing the infusion to remain till cold, when it is poured off. "These two gallons of liquid," he says, "constitute a safe agent, and one of the most potent remedies for scab. Half a pint of it (from a bottle with a quill in the cork) on the skin at the back and sides of the sheep. Two or three dressings will be found sufficient to cure the most inveterate cases of scab in sheep." The digitalis leaves can be obtained at any drug store.

Flemish Sheep.—The Paris *Journal d' Agriculture de Pratique* speaks of them as "the type of foreign meat-producing breeds," adding that this breed "is distinguished from all others in Europe by the elevation of its height, length, and the narrow form of its body. Thus rams have been observed which measured from the nape of the neck to the spring of the tail, 5 ft. 6 in. Its head is well developed, but without horns, and carries its ears horizontally; its chest is long, tail thin and long, frame heavy and its limbs large, solid and heavy. The gait of the breed is firm and free, and indicates good walkers—a useful quality. Animals of this breed are great eaters, and consequently not very economical to graze. The wool attains a length of eight or nine inches. It is abundant, unequal, and of mediocre fineness, if such a term can be applied to it. The sub-Picardian breed is not so high or so long as the parent breed; its wool, also, is shorter, but as a compensation is less coarse. The fecundity of the Flemish race of sheep deserves particular mention. The female generally gives two lambs at a time, and she yields an abundant quantity of milk, nourishes and brings them up well."

Horse Racing in China.—Races have been got up at Pekin, and proved a decided success. They were held in the dried-up bed of a lake, near one of the Imperial palaces, outside the walls. A better spot could not have been chosen, as the slightly elevated ground, forming what were the edges of the lake, afforded good standing ground to the thousands of spectators who crowded to witness the sport. It is estimated that at least 50,000 Chinese attended, besides the members of the several foreign legations, and several of the Chinese foreign ministers. Between the third and fourth races, the drilled Manchu force, which was organized by Captain Coney, marched on the ground, and performed a series of manœuvres, after which all the high officials, native and foreign, entered a large tent and took luncheon. The whole affair was most successful, and seems to have been highly appreciated both by the Chinese and European spectators.



HORTICULTURAL.

WATERING PLANTS.

The idea is a popular one. It is also, in a great measure a fallacy—a fallacy, because it is not done right. We water to give the thirsty plants a drink: that is poetical—and has much to do with the popularity of watering plants.

But you will not deny there is a benefit in it. Deny it! On the contrary, we are the greatest of advocates of irrigation. But we are at the same time also aware of the abuses it receives. We do not water aright; very few people do—and yet they do their best, they think. They water profusely and frequently—and yet their vegetation is about the same—perhaps a little paler. So they stop watering.

Now all this is wrong. We are to look to nature, and listen to her teaching. That we have not yet done; we have not yet made it rain, only in a falsely-artificial sense. We sprinkle, indeed—use soft water at that—rain water, if you please—and we give it a good dousing. But still it isn't rain.

Now, then, our dousing will not do—the rain never douses, though sometimes it comes pretty near it, and then we see the effect on the ground. When it rains, it drops not the tenth part the water that we rain on with the watering pot. A watering-pot, watering the whole land for five minutes, would deluge it—would make the ground muddy, and pack the top-soil with crust—A very hurtful operation.—Hence, we water too strongly altogether. The watering pot streams—the rain drops.

But who will ever water a garden with your fine sprinkling? He that has the patience, and is inclined to do it—certainly not the lazy man. He will take time, and give it a *slow, long, thorough* watering, that will last a week or fortnight. This is nature's way, when she soaks the ground, so as to have a cloud of vegetation follow. A day or two after, when the soil is between the wet and the dry, at the point that mellows best, stir your soil. If by any inadvertance on your part, a crust has formed—that wants breaking; for your soil *must* breathe—and a crust is not the thing to help it. Sun and air are necessary to vegetation, and a mellow soil is the means of doing it. Where there is a good soil, properly cultivated, and carefully sprinkled, no crust will form, or no more than results from an ordinary shower. Clay soil, however, will not bear a heavy, sudden rain; it will cake the top. So with watering a clay soil, even if but little clay is present. This point should be carefully considered. Clay is a delicate thing to manage under all circumstances, but most particularly where water is concerned, followed by the sun. We make brick of clay, aided by water and heat. Our farms are often brick-beds.

Water, then, carefully, slowly, *finely*—and soak well. The water a little impregnated with some manure, all the better. Drop low, so that the fall is as light as possible; but, best of all, cover your ground with straw or some other kind of mulch, and then, when you water, there will no crust form. F.G.

KEEPING APPLES.

R. P. Marsh, of Brandon, Vt., states that he had, last July, Rhode Island Greenings, Northern Spy and Spitzenberg apples fresh and juicy and of good flavor. He says one mistake in regard to apples (and we may add in regard to winter pears also), in picking them before they are thoroughly matured. "My experience," he says, "in keeping apples for the past thirty years is simply this. I have packed them in buckwheat hulls, wheat bran, dried sand and sawdust. I have also kept them on shelves and in barrels with no intermixture of other material. The latter I consider the best method for two reasons: 1st, They kept as well or better; 2d, They are fresher, more juicy, and, consequently, more delicious eating. In the latter part of last November, 1862, I took clean, dry flour-barrels, and set them on pieces of scantling in my coolest and darkest cellar room. A part of them I filled with apples, and nothing but apples. In part of the barrels I placed very dry corn-husks at the bottom and sides, and then filled with apples. Another portion of the same varieties of apples I placed in single layers on wooden shelves in the same room. In February and March I examined the apples, and found those in barrels, with husks at the bottom, had many of them decayed, and the rotted ones seems to affect all the rest, for there was a damp mold reaching nearly to the

top of the barrels, and many of the apples covered with it. In the barrels without husks there was a mere trifle of unsound fruit, while it did not affect (as in the other barrels) the taste of what remained sound. On the shelves about the same proportion decayed as in the barrels without husks, but the apples in these barrels seemed a little fresher to eat than any of the others.

"On the whole, then, I consider all the mystery about keeping apples is to have them carefully picked, without bruising, quite late in the season; kept in a cool place, free from frost, until the sweating process is completed; then placed in a dark, cool room in the cellar in barrels, as described, open at the top, or on shelves, as preferred. If there is any better way, I have not found it. It should be borne in mind, that if the heat from a furnace, or any other artificial heat in the cellar, comes in contact with the fruit, it is sure to injure it."—[*Ex.*

HORIZONTAL TRAINING.

Our friend, "H. P. B.," says, in reply to an article of ours, that "by bending a limb horizontal or downwards, the *growth of wood is checked and fruitfulness promoted.*" We ask, Why is the growth checked? and answer, Because the fruitfulness is promoted! The strength goes into the fruit instead of the wood. So it is with the vine when pinched back; the strength is thrown into the fruit—but more by the horizontal method. Clip the fruit, and the foliage will receive the increased growth caused by the horizontal position.

The writer of this does not know that he "asserted that the growth of a vine or fruit tree was promoted by horizontal or downward training." He has not the paper to refer to; but thinks he had reference to the growth of *fruit* alone. But this matters not. Authorities matter not—for increased growth in the horizontal position, is not the point in dispute—but *gravitation.* It was merely an opinion given by the writer—and may have been a wrong one—or may not. We ask our disputing friend whether gravitation has any influence at all upon the sap of vegetation? If it has, why not an equal influence upon downward-growing limbs, and, as a necessity, aiding the flow of the sap, thus increasing its volume and its effect, by the course being turned in its favor. The resistance to the capillary attraction being thus overcome, there is an impetus given the sap, and hence an increased amount of tree food used. The thing to the writer is clear. Let us hear upon the point from "H.P.B." F.G.

SLOPS FOR THE ORCHARD.

There were a number of trees. One got the benefit of the manure heap near the stable, and it grew exceedingly; but the fruit did not keep up with the leaves and the wood. This was a Spitzenberg.

Another tree (a Fall Pippin), had the advantage also of the barn-yard, with the same effect. These trees were in grass. There was one that had hoed crops around it for years, say a dozen or more. This had a disposition to die. The affected limbs were taken off, and the tree thoroughly pruned. A new life was put into it, and its fruit was unsurpassed—Fall Pippin and Early Strawberry. Still another (Spitzenberg), had the benefit of a privy, but it showed no benefit in its fruit or foliage.—There was one tree that received the slops from the kitchen in part. This wrought a miracle. It was a Spitzenberg, and no such large fruit was grown in the orchard. But there was an unsoundness at the core in some of the apples which we have seen in this fruit when kept late in the spring. Besides, the bole of the tree was nearly all dead, only a small strip of bark running up one side. The present season being one of considerable drouth, and the slops being used nearer the bole and all around—which was not the case before—there is a still better growth this year, of fruit and branches, than ever before. We are constrained to give into the slops from the kitchen. Not much was used. The ground was simply kept moist—not wet.

Wine Making.—Pick the grapes off the stems when fully ripe, rejecting the bad ones. Pass them through the wine mill to tear open the skins, but not to bruise the pulp. Press moderately; then get all that remains in the must to make brandy or an inferior sour wine of.—Strain and fill into clean barrels; then insert a bent tube tight in the bung, and let the lower (outside) end rest under the surface of water in a bucket, so that while all the gas shall escape, the air will not get to the wine. When it has done fermenting, rack it off into clean barrels, bung it up and set in a cool place—bottle it in a few months. The great secret of making good wine is to select only the best grapes, and not press out the sour portion of the pulp.

Nothing is here said about the numerous mixtures of water, sugar and grape juice which are frequently concocted and sold under the name of wine, but only to the pure juice of the grape, properly fermented.

The Russel's Prolific strawberry holds its superiority. It is a pistillate and requires another—the Wilson—to fertilize it. It seems, more and more, to be the berry for the country.

The Work Performed by Roots.

Roots have mouths—the finest roots. And what are mouths for, but to eat and drink?—for these mouths don't talk. Would they could. How they would scold for not having food and drink enough. Now, these little mouths suck up only what is in their way. The side-ground retains all its richness—only what lies before the little root is taken up. So you see there is much strength left in the soil after a crop, or between the roots. "Pity this can't be had," you will say. Yes, but then the plant will put out new feelers, and thus keep on till it gets pretty much what strength there is. Hence, forest soil is not so rich as our cultivated fields. One season, however—one crop only—exhausts but little of the soil, as it has comparatively but few roots to penetrate it all. If we give an orchard a coating, and the soil is disposed to be leachy, sandy, you will see the benefit. If it is loam, humus, you will see but little of it, unless your roots are close to the surface, which is not generally the case. In gravelly soil, you are wise, if you give your stunted trees a coat of well-rotten manure. But your manure will benefit only the grass and grain you may put in your orchard, if the roots of your trees are deep, and the soil is a compact loam or clay. When clayey and compact—as is apt to be the case with clay—your trees receive no good at all from the manure. Native, deep, rich soil, is always the soil for trees. F.G.

How to Give the Benefit of the Upland To the Valley.

You cannot very well raise the valley and make a hill of it; but you can do much towards giving it the seed-perfecting, healthy and ripening principle. For, though there is more air on the upland, there is not necessarily a lack of it in the valley. The valley grows more heavily; hence, gathers moisture the more readily. Besides, we plant as close in the valley, or closer, as on the hill—a great defect.—We must scatter, scatter on the plain. Let the air in and the sun. The mildew has little chance, then—rust and mould are words unknown—or if known on the lowland, are apt to be known on the hill also. But do not crowd. The less strength of the hill will preclude this. Insects hurt in the valley; less on the hill.—They find places to harbor along the ambushed fields and dense foliage. Strip the lowland of this, and there is a different state altogether.—Plant further apart; that, experience tells us is the thing; that is reasonable. We want to force our soil; that will not do: in many ways it will not. Depend upon it, if you give the wind a chance, it will come and fan your vines and your corn. Invite it then. The desert, with its sparse vegetation is never mildewed.—Poor soil has little fault to find in this respect. The same field shows the difference in the heavy and the light grain. Heavy grain on a hill will lodge and rust and mildew. You can transfer the valley to the hill in this way if you please, just as you can the effects of the hill to the valley. W. I. T. S.

Experiments with a Grape Vine.—Not exactly experiment, intended, but accidental manifestation. We have a grape vine, some fifteen feet square, on the south side of the house, where it is well exposed to the sun, and consequently is an early and good grower. At the west end, the wind has free access to that part of the vine: not so at the east. The east part was the thriftiest this spring, in consequence of the west part having its vines too severely bent. But having overcome this, the west is thriftiest and healthiest—a perfect pleasure to look at. The east suffers. There is rust affecting the leaves, and the fruit is being coated over with a white dust—mildewed. The clusters are ailing (this 4th day of July), the berries are scattered and small. And yet the vine is some four feet from the house, and the foliage not dense—kept down. F.G.

A Dangerous Fruit Worm.—There is a worm, going in squads, that is most destructive to fruit trees. It attacks a small limb, and in a day strips it. There is generally a party of them together, say from a dozen to fifty; sometimes more. They are a "beautiful, horrid looking worm," as we heard a friend say. The moth of this larva is called the *Pygæra Ministra*, or Handmaid Moth. When we discover the larvæ in our trees (and it is necessary to be daily on the watch), we cut the branch and put it in the fire. August is the raging month for this worm, though it will extend to July and September. Keep a sharp look out for it.

Just a strawberry patch. "Yes, but they won't thrive; I have tried it." But you have not tried it aright. Take pains, a little, and see. You know others have luck, and there is no mistake about it; you can have them by taking the means we have so often indicated. Once your hand in you will always have the delicacy. Just this we will say: mulch with straw in hot weather—and water.

ON CIDER AND ITS USES.

There are very few persons that have not heard of cider; yet comparatively few are aware how rich a drink it is when made pure; free from water, the taste of straw, and all the impurities that, under the old fashioned system of cider making, are incorporated into its composition.

When pure and well made, it is doubtless far healthier than wine, and for liver complaints it is a sovereign remedy. On this account alone, the portable cider mills that make cider without straw, are a benefit to the community, and when the farmer takes the same pains with his cider, that the vinegrower does with his wine he will find an unlimited demand for it at highly remunerative prices, and if the severe excise tax now imposed on whisky will turn the attention of the people to cider, it will confer an inestimable benefit.

Pick all the apples, rejecting those not sound, and wash them clean, and afterwards let them lie and get dry. Grind and press them, using no water or straw, or any substance that will give the cider an unpleasant taste, as on the purity and cleanness of the apples depends the quality of the cider. Strain the juice through a woolen or other close bag, put into clean barrels and set in a moderately cool place, keeping the barrel full all the time, so that the impurities may work off at the bung. After has done working, rack it carefully off, let it stand a few days and bung it up. As the air tends to sour the cider, it is a good plan to provide a bent tin tube, one end fastened in the bung and the other to drop down into a bucket of water. This will let all the gas pass off, and not let the air get to the cider. The quicker the pomace is pressed after being ground, the lighter will the color be; and darker, if not pressed for 24 hours after being ground. The cider from the second and third dressing will be the richest—the reverse is the case in making wine, as a severe pressure on the must makes sour wine. Cider making should be conducted with all the care that wine making is. Most any good sour apple will make cider, but more generally an apple full of juice and not very good to eat, will make the best. The Virginia crab excels all other apples for cider making.

When bottled up with a little rock candy and wired, it will, after standing some time, sparkle like champagne, when opened. To get cider very strong, expose it in a tub in extremely cold weather, and remove the ice that forms, as this can only be water, it leaves the ice that forms of additional strength.

Any substance which is put in to arrest the fermentation is of doubtful value, as all good cider must be perfectly fermented to be healthy. You had better depend rather on careful and clean making, and bottle tightly at the proper time.—[*Ex.*

With respect to strawberries, dry soil will give fruit, but wet will give leaves and vines. In both cases the soil is to be rich and deep. This has been so decided by our best growers of strawberries. Moisture at the bearing time is always necessary.

Proceedings of the American Pomological Convention,

ASSEMBLED AT ROCHESTER, N. Y., ON TUESDAY, THE 13TH SEPTEMBER, 1864, AND TWO FOLLOWING DAYS.

The meeting was called to order by Mr. Jas. Vick, Secretary, who read a letter from President M. P. Wilder, of Mass., stating his inability to attend this meeting, and professing continued attachment to it, and interest in its success:

Whereupon Vice President, Dr. John A. Warder, was called to the chair.

A Committee on Business, and one on Fruits on Exhibition, and another on New Fruits, were severally appointed.

The President stated that, in consequence of the suddenness of his appointment, he was not prepared with any opening address.

It was, on motion,

Resolved, That the Society proceed with the discussion of apples, till the Business Committee have time to report.

Mr. Nelson, Ind.: The Ben Davis is a most desirable apple, an early abundant bearer, hardy, fine grower, keeps longer than almost any other—till May. Produces more at the same age than any other tree.

Mr. Batcham: About second rate, not quite so good a keeper, but quite profitable in orchard and market.

Mr. Barry: I have seen it from the West; at the time we made out this catalogue, there was a doubt as to its identity.

Pres. Warder: As to Ben Davis being the proper name—none as to the identity of the apple. New York Pippin is a misnomer, without any connection in fact with the apple; it is the Victoria Pippin and Carolina Red Pippin of some. It is productive, about medium quality; it does not keep in all localities so long as May, but is very desirable for market.

Dr. Edwards: There are a few trees of it in Ill. and Mo. It bears transportation well, the skin being tough.

Mr. Beehler, Ind.: It is a very tender flesh, though a tough skin.

It was, Resolved, That this apple be recognized as properly, Ben Davis.

Mr. Parry, New Jersey: Batchelor's Blush has a fine yellow, smooth skin; comes latter part of August, fine for cooking; much like Maiden's Blush, but little better. Seen in his neighborhood several years; quite distinct from Maiden's Blush.

J. J. Thomas: I think I have seen as much difference between the fruit of two different trees of Maiden's Blush, as between this and Maiden's Blush.

Mr. Parry presented the Princely, Geni, and Lippincots Sweet, which were severally tasted and admired by all.

Mr. Batcham presented the Cogswell and Ohio Nonpariel, and pointed them out as quite distinct.

Mr. Downing: I think them distinct; the Ohio Nonpariel is a most vigorous grower.

Mr. Batcham: Their greatest difference is the time of ripening.

Mr. Batcham presented Grimes' Golden Pippin.

Mr. Marshal, Ohio: The original tree is sixty years old. It came from Virginia, is vigorous, a handsome apple. January to April.

Mr. Beehler, Ind.: It is hardy in Indiana.

Mr. Nelson, Ind.: King of Tompkins Co., is fine with me; it tends to drop from the tree.

Mr. Harkins thinks that is a great fault with it.

Mr. Sangwell, Monroe Co. N. Y.: Have had it fruiting 4 to 6 years, a fine producer, fruit showy, fine size. Many think it the finest fruit in the country.

Mr. Batcham: The reports are not very favorable of it in Ohio. It bears too much the one year, and the fruit mostly drops and bears none the other.

Mr. Barry: I have fruited it only this year, and it dropped off badly.

Mr. Ellwanger: I think that in young trees it may drop off; in older trees it will not bear so much and will be of better quality, and will not drop.

Mr. Beehler: The fault we have in the West for this fruit, and some others, as the Baldwin, is the season is too long.

J. J. Thomas: It bears from a half to two-thirds as much as the Baldwin; when it is not too large the flavor is good.

Mr. Maxwell: It bears fewer bushels than the Baldwin, but it will make it up in price.

Mr. Sylvester: I have had it for several years, the fruit apt to drop; it produces full two-thirds as many as the Baldwin or Greening, and brings a better price.

Mr. Nelson: There is a great difference between the Baldwin and Greening in fruitfulness.

Mr. C. Downing: I think much of the Magnum Bonum; it is one of the finest of our apples. It ripens in September in Georgia, and in January here.

Mr. Hoadly: I think much of Milam. It is rejected by many, but is a good fruit.

Dr. Edwards: It is a good apple; it is one of the very best for cooking, retaining more of the real apple flavor than any other, when baked.

Mr. Muir thought much of it as a baking apple. It is a young and regular bearer, and bears uniformly all over the tree.

President: It is Milam or Blair.

Mr. Beehler: Westfield Seek no Farther. In Northern Ohio it is a green fruit, and the same with Jeneton, Fallawalden or Tulpahocken.

J. J. Thomas: In the North it is small in size, but worthy of cultivation in our country. In some localities it is called Fallawalloper.

Mr. —: We have tried it in Western Canada and like it.

Mr. Barry: Fine and fair; good market apple, quality fair.

Mr. Paul: In Mass. it is a fair apple, of second quality, poor for cooking, a poor keeper; but a fine frying apple.

Mr. Beehler: It bears early and runs quick out.

Mr. Harkins: A most popular apple in Southern Penn.

Mr. Batcham: Has known farmers keep it till winter, and sell it at fabulous prices. They kept it in the dark, in air a little moist.

Mr. —: Ridge Pippin. Think it is worthy of notice for New Jersey.

Mr. Nelson: Wagner. A good apple with me.

Mr. Paul: Does well in Mass.

Mr. Harkins: Does well in Penn.

Mr. —: The first to bear in sixty-five varieties.

Mr. C. Downing: Klaproth. It is very fine with me—most beautiful.

Mr. C. Downing: Rediman. It is the best and best looking apple.

Mr. —: Cornel's Fancy. Very fine.

Mr. —: Jeffries. It is good with us in New York.

Mr. Nelson: Evening Party. A handsome small apple—too small for market. Desirable for family early part of winter.

Mr. C. Downing: Knows but little of it, but that little favorably.

Mr. Nelson: Northern Spy. Slow in bearing, large and fine in some places; has a fair crop this year, does not keep so well as in some places.

Mr. Marshall: As I become more acquainted with it, I like it better.

Mr. Muir: It does not hold the reputation in Mo. that it has East.

Mr. —: I have had it for fifteen years before it bore, and it bears well, every year better and better.

Mr. —: It is one of the handsomest apples that comes to market.

Mr. —: In Mass. I have a good opinion of it.

Mr. Thorp, Mich.: When young thinks it poorer; but gets better by age.

Mr. —: It does not in the North come into bearing early; it takes about ten years to make a growth. Small crops when young; keeps till May or June. The tree makes a great many branches; the first year apt to overbear, and the crops be inferior. Think them good apples and good keepers.

Mr. —: Coopers' Redling. I think highly of it, it keeps till May and June.

It was remarked that there were some corrections required in the lists of the fruits in the several States and their status; it should be done now.

Monmouth Pippin. It does well in New Jersey, Penn., and New York.

Mr. —: Ribston Pippin. I have known it fifty years; it does not do well in warm climates; it ripens prematurely in cool climates; it is a good apple.

Mr. —: I have seen it shipped with Newtown Pippins to Scotland, and bring $15 a barrel.

Mr. —: That is the same as my experience.

Mr. Nelson: It is at times a fine apple. I never saw so fine an apple as last year; tree a poor grower, tender, and generally a poor bearer.

J. J. Thomas: Sometimes very fine with us, but not always.

Dr. Houghton, N. Y., introduced a resolution of instruction to Committee on Office Bearers, which caused some warm discussion, and was on the following day, with permission of the Meeting, withdrawn by mover.

SECOND DAY.

Dr. Warder in the chair.

The President introduced Dr. Trimble, of New Jersey, to deliver a lecture on some insects injurious to vegetation.

We have two enemies that stand in the way of the successful culture of fruit—the Apple Moth and the Curculio. The curculio is the greatest enemy we have; it attacks the plum, nectarine, apricot, peach, and apple—perhaps the pear is the only fruit that is really exempt.

Some say that the curculio does not attack or injure our apples; but this is because we do not observe his habits with sufficient closeness. The Apple Moth does not take our stone fruits, but only the apple and pear. This season its ravages are immense, but still I find that it is to a great extent, under our control. I have been shooting the little birds to see if I could detect in their stomachs, by the aid of a powerful microscope, any insect remains in their food. In the stomach of the little Chicka-de-dee, I found five larvæ of this Apple Moth; and in the stomach of the Hairy Woodpecker, I have found the remains of this larva, in considerable quantities, and in one three. He goes in the winter and examines the trees, and whether it is, that he sees or smells the larvæ, I know not, but he makes a small hole in the bark, and finds the larvæ eating out the inside of the bark. Here are samples of the traces of the larvæ, and the hole made by this Downy Woodpecker. This bird is not the Sap Sucker, but quite a different bird. [Exhibits a fine colored plate of the heads and tongues of Chicka-de-dee and Downy Woodpecker].

The Moth comes out in its perfect state in June, and

till the middle of July, and those that are not transformed by that time, remain in the larva state till the following season. [This may be a little different in Missouri as compared with New Jersey and New York.]

The Dr. exhibited a Beurre Clairgon with the marks of his operations, and some of the worms (a small brownish worm), also the cocoons and cases and fine drawings of the perfect insect. The eggs are deposited in the blossom end of the fruit, one egg in each fruit; it hatches out in a few days, living upon the interior of the fruit, and then drops to the ground where it wriggles about till it gets into an opening or crack in the bark. In young trees where the bark is smooth, there is no protection for him. If he finds nothing better, he will go into the opening in the rails of an old fence, or into the openings between them, or between two boards laid nearly close, or into the creases of old leather, and those trees that have scaly, rough bark, are a certain resort. Into any of all these they go and make their cocoons and pass the winter.

I think that wooden troughs hung in the trees would be attractive to them. In an orchard I found a tree with a little crotch, with an old boot-leg thrown into it, and I found in the creases eight caterpillars. Upon this principle I tried many contrivances of cloth, &c., to trap them, and in a piece of hay rope, coiled loosely round the tree six inches broad, and three coils thick. I got ninety-seven of these caterpillars in ten days. Some had become moths. The early ones became moths the same season, the others remain all winter and come out next spring.

It is easy to move this coil up the tree and take off and destroy the insects. In a piece of chamois leather, put around a tree, there were fifteen worms upon the tree under the leather, and here are some of the worms.

In regard to the curculio, it comes out and falls to the ground, and the only chance is to gather the fallen fruit, and destroy it before the insects leave it. In this our domestic animals help us—hogs, horses, cows, all eat them. I picked up fifty fallen apples and fed them to an old cow, and she eat them in five minutes, and looked up as if to ask if I had more. The Apple Moth differs in this, that it, in most instances, leaves the fruit before it falls, and drops by a thread to the ground, or to some near object; in this way the birds get many of them. This season fully half the crop of apples is destroyed by this apple worm.

I think that these subjects are much more important parts of the duty of this, and kindred societies, than the construction of a long catalogue of fruits, that we cannot gather for the army of insect enemies.

J. J. Thomas remarked it would take about a ton of hay to every thousand trees, to make a coil to go round the trees, three coils thick.

In answer to questions: They should be examined at least every two weeks, from 1st June till 1st Aug. There are no caterpillars formed later than 15th July. I found in this Convention one gentleman who did not know the curculio. Here are fifteen of the real live Apple Moths, and some of the pupa cases of the first crop.

Speaking of the curculio, reminds me of an experiment upon the curculio in the apple. I took a flour barrel, filled it with apples, and kept it in the winter in a cool, moderately moist place. In spring I covered the barrel with gauze and set it out; the insects were thus prevented from getting away, and I found seven hundred curculios. In an experiment, another season, I got only a few.

Many of these insects are prevented from becoming a perfect pest, by being very susceptible to the changes in the climate. The extremes of heat and cold and drouth, are destructive to them—drouth in particular, when they are in the state of transformation. And thus in a season that is particularly unfavorable to them, they are not developed, and had I at such a time, tried the soap remedy, or some other quack remedy, I would have been led away with the idea it was that had done it. Our great natural helps are, the weather, domestic animals, and the Chickadee-dee and Hairy Woodpecker.

Mr. —, moved a vote of thanks to Dr. Trimble, for his truly interesting lecture. This subject was one of great importance to us, and we should be exceedingly glad to have some action taken by the Society upon it. I am glad to have such men as Prof. Fitch and Dr Trimble, take up the subject and come to our help against these insect enemies. Adopted.

Mr. Barry: I like this lecture on Entomology. I long ago took up this subject as one of vast importance to us. I must remark however, upon one idea that Dr. T. and others have got, about the length of our catalogue of fruits. The very tendency of this catalogue is to shorten the list. We want to try all the fruits in all parts of these United States, to see if we can find a few fruits that will fulfil all the indications required, and to try the new fruits so as to be able to recommend only those that are known to succeed; and there are so many varieties of soil, climate, &c., in such an immense area, that there are none of all the European societies, that have a tithe of the work to accomplish; and it is only by adopting the course we have done in our last catalogue, that true results can be obtained.

J. J. Thomas: We desire to obtain new fruits, not for the purpose of increasing, but diminishing the number; as it is well known that one really good fruit, often fills the place of four bad ones, so that we shall be able to discard a great number of varieties.

The Committee on Nominations submitted a report of Officers for the current term.

The following are some of the Officers:

President—M. P. Wilder, Mass.

Vice President and aid to President—Dr. John A. Warder, Ohio.

Vice Presidents—Dr. B. F. Edwards, Mo., D. D. Wier, Ill.

On Executive Committee—W. C. Flagg, Ill.

On Fruit Committee—Wm. Muir, Mo.

[Reported for the Valley Farmer.]

Meramec Horticultural Society.

KIRKWOOD, 11th August, 1864.

The sixty-eighth monthly meeting was held in the "Grove," Kirkwood, President Beale in the chair.

The President appointed the following delegates to the National Pomological Convention, which meets at Rochester on the 13th Sept.:

Messrs. H. T. Mudd, J. G. Helfenstein, P. M. Brown, Chas. Connon, Geo. Couch.

The President appointed the following gentleman as managers of the several departments, at the fair on the 8th Sept., viz.:

Fruits, Jas. Cornwell; Flowers, J. G. Helfeinstein; Vegetables, Wm. Essex; Grains, L. D. Yotaw; Needlework, P. M. Brown; Paintings and Ornamentals, Jas. Shields; Cookery and Confectionery, John Letcher.

The Committee appointed to report on printing essay of A. Fendler, Esq., state that while we highly prize the effort of Mr. Fendler, the Committee are of the opinion, that we shall be unable to publish in this extra manner, all the valuable essays which may be delivered at our regular meetings; also, believing that those who are entitled to be benefitted by our discussions and essays, should avail themselves of the means of doing so, by a liberal support of the "Valley Farmer," the local agricultural periodical through which they are given to the public, believing that journal to be eminently deserving the patronage of all Western horticulturists and agriculturists. We would therefore recommend that the proposition be respectfully declined. JAS. CORNWELL, Chairman.

The Fruit Committee reports a fair exhibition of apples in season, both in number and quality. The severity of the past winter, and the drouth of the present summer, had led your committee to fear that

we should have little or none offered at our present meeting, and although the show is not such as we should have had last year, it is such as to give promise of continued attention in this direction, and encourages the hope that, with more favorable seasons, we shall have such exhibitions as shall be cause of just pride to the Societies organized amongst us, to encourage and promote the production of, and improvement in, the fruits of our country.

Wm. Muir presents Early Harvest, Golden Sweet, Hawley, Maiden's Blush (not ripe), Summer Rose, Keswick Codling (not ripe), Red June, Spice Sweet, and Small Yellow Siberian Crab; also branches of Catawissa Raspberry in full fruit.

Capt. John Sappington, a dish of fine looking apples, thought to be Summer Queen.

R. S. Elliot, Dearborn's Seedling Pear, and a variety unknown, supposed to be Bloodgood.

Wm. T. Essex, Red June apples.

Eugene Schneider, Red June, Sweet June, Primate, Benoni, Jersey Sweet, Sweet Bough, Am. Sum. Pearmain, Gravenstein, and the following not quite ripe—Munson's Sweet, Dyer or Pomme Royal, White Seek no Farther, Keswick Codlin, and Dearborn Seedling Pear.

Geo. W. Gill, Dearborn Seedling Pear, and Yellow Siberian Crab.

Rufus A. Lewis, a Seedling Winter apple and Hartford Prolific grape.

Thos. Mills, four varieties of apple without name, one of last year's crop.

H. W. Bough, three varieties of apple and three of pear, without name, and Dracut Amber grape (not ripe.)

Mrs. Leonard Matthews, jar of peaches, well preserved and of very superior quality.

Watermelons by Geo. H. Gill, Taylor Gray, Orange, Mountain Sprout, and Wat Miller.

E. R. Mason, Hartford Prolific grape.

Mr. Jordan, Dearborn Seedling Pear; Hartford Prolific, Creveling, Roger's Hybrid No. 3, grapes; and Queen Claude De Baray, and another plum.

Dr. Edwards, Franklin, Hartford Prolific, and an unknown grape.

The Flower Committee reports finding the usual display of flowers, that always distinguishes Kirkwood, and intimates its close connection with the city, its highly cultivated taste and ample opportunity and desire for improvement. Amid so great variety it is very hard to decide which is absolutely the best, there is in fact no room for comparison, each collection having special merits of its own. That of Mrs. Elliot is strikingly beautiful. Miss Bodley presents an extensive collection of very valuable flowers. Mrs. Leonard Matthews introduces in a neat boquet, an effective and entirely neglected branch of floriculture—variegated leaved plants. Mrs. Essex exhibits her usual taste in arrangement. Mr. Connon has some Double Zinnias and fine Feverfews that merit attention; and the Gladiolas and Japan Lillies of Mrs. Madd, presented a magnificent appearance. Miss Albright has a very neat collection—and some others had no name. Mr. Jordan presented six new varieties of Gladiolas, all very beautiful, and regarded with much interest by the assembly. Altogether the exhibition of flowers was gratifying in the highest degree.

The Vegetable Committee reports: Geo. H. Gill presents fine specimens of Fejee and Tree tomatoes, with specimens of Bull Nose and Cayenne peppers, Evergreen Corn, Parsnip, Carrot, Lima Beans, Large Ruta Baga Turnip (but evidently planted too early). L. D. Votaw has specimens of well-matured field corn, both white and yellow, also White Sprout potatoe. R. S. Elliot shows fine specimens of Perfected tomatoe. H. W. Hough shows White Sprout potatoe and California tomatoe. Wm. Muir presents handsome specimens of Silverskin, Wethersfield Red, and Danvers Yellow onions; Scallop and Summer Crookneck squash; extra fine specimens of Red sweet potatoe, and Martynes for pickles. Wm. T. Essex has specimens of Fejee tomatoes and White Sprout potatoes.

Col. N. J. Colman was called upon, and delivered a very beautiful and effective address upon the social influences of horticultural meetings.

A bottle of chinch bugs were presented by Wm. T. Essex from a friend in Rock Island—a useful and interesting entomological subject.

Samples of wine were presented by Mr. E. R. Mason.

The Meeting adjourned to partake of a most sumptuous dinner prepared for the Society and the very large assemblage of guests, by the ladies of Kirkwood.

The meeting being called to order. It was on motion, Resolved, That a Committee be appointed to test the Wines on the Table: Whereupon, the President appointed Messrs. J. P. Helfenstein, B. F. Edwards, N. J. Colman.

Mr. R. S. Elliot was called upon and responded in his usual happy and witty manner.

Wine Committee Report—The Committee appointed to examine the Strawberry and Blackberry Wines on the table, presented by E. R. Mason, respectfully report that they find the strawberry wine very pleasant and agreeable—superior to any ever tasted by the Committee made from the strawberry, with one exception. The blackberry wine is very superior.

J. P. Helfenstein, B. F. Edwards, N. J. Colman.

The Executive Committee offered as a subject for discussion, "The advantages and disadvantages of growing clover in orchards." Adopted.

Col. N. J. Colman, by request, opened the discussion. He advocated the growth of clover in orchards, and took issue with J. J. Thomas on this subject: his views are possibly correct in the North, where the air is more humid, and not subject to such extremes of heat, cold, and drouth. The long tap root penetrates, opens and enriches the ground to a considerable depth, while its leaves form an excellent mulch and top-dressing; and in poor and broken soils, it is the only available means to enrich the soil and prevent its washing away. The opinion of Dr. Warder, and he has much experience in our Western soils, harmonizes with these views. The late Capt. Harper, who for so many years raised the largest crops of the finest apples that were taken to St. Louis market, had his orchards in clover. I do not mean to raise a crop of clover and a crop of fruit too, but to turn the crop of clover under every few years—but Capt. Harper raised a large clover as well as fruit crop.

Mr. R. S. Elliot was, in some respects, rather opposed to clover cropping.

The Secretary supported Mr. Colman's views; thought it the only mode by which the soil can be retained on broken lands, both in orchard culture and general field crops. He instances the fine fruit so often exhibited before this Society by Judge Becker; and that, now, Mr. Brachos, a most careful cultivator of the soil, finds it best to turn his orchards in clover.

Dr. Edwards had observed the effects of orchard culture in different manners and States for sixty years. Would have an orchard cultivated for a few years in corn and hoed crops, and then put in clover for three to four years; then cut the crops and plow under. Blue grass becomes too impervious a mass. Orchard grass better—not so good as clover. The clover root dies out about every third year, and a new root is reproduced. The first two or three years I would not put in clover, but some cultivated crop. Corn shades the stems of the trees.

Eureka, 1st Sept., 1864.

The sixty-ninth meeting was held in the schoolhouse, Eureka. President Beale in the chair.

The following communication was read:

Mr. President and Members of the Society: The action of this Society, in regard to the culture of the soil, has embodied a great variety of topics, all em-

braced in answers to the ever-presented queries—What, When, How, and Where to plant? and anything that tended to elucidate either of these subjects has ever received its most earnest attention. This anomalous year, almost equally severe in its spring and summer, with its unparalled commencement, has led the members to take steps to ascertain the nature and extent of injuries sustained; but a question of great interest having been presented, viz.: "How far has the uplands of this district been affected by the frost of last winter?" your Secretary conceived that it properly lay at the door of the Society to enquire into the matter. Your Secretary visited the grounds of Mr. F. Braches, at Gray's Summit, a point of equal, if not greater, elevation, with any in this county, and found the effects of the winter severe indeed. In grape vines a mere moiety of a crop. The canes of this season are very fine, giving great promise for next year. The peach trees Mr. Braches cut back to the trunk in spring, and is now resolved to dig out. Pears suffered severely, particularly the Vicar of Winkfield. Apples small, wormy, knotty, and in every respect badly developed.

On Tuesday last, Messrs. Wm. Harris, L. D. Votaw, and your Secretary visited the grounds of the St. Louis Vine and Fruit Growers' Association, and made a most minute examination of several hundred vines, and of vineyards extending over forty acres, and orchards and other fruit lands of nearly one hundred acres.

In the young vineyards, we found that where the grounds had been cultivated and the vines tied up and kept in order, they had a very fine crop, having from 3 lbs. to as high as 10 lbs. of grapes, very evenly distributed over the canes at various heights, from 10 in. to 4½ feet from the ground. This was the case with from five to seven acres. Where the vines had been neglected, which was the case in but too many acres, from the want of the proper amount of funds to attend sufficiently to such a great area, and allowed to run in the weeds and brush, there was scarcely a grape. We found the soil thin, in a moderate state of cultivation; the vines pruned in the spring and tied up to stakes—no summer pruning; with good crops of fine grapes, free from rot. There was no positive evidence in the vines themselves as to how the vines had been all winter, but Mr. Haven assured us he had not the means, last winter, to cut loose his vines and attend to the grounds as he wished, but that they remained tied up till the spring pruning. Where the vines had the heavy crops, the pruning was performed by Italian vinedressers, who trimmed off the lateral growth of the previous season very closely, but left several main canes four to five feet long; while in several acres pruned by a German, and cut short from 10 to 15 inches, the vines made a heavy wood growth and little or no fruit. Another vineyard which was cut back severely for cuttings, presented the same appearance.

The old vineyard which last season exhibited symptoms of exhaustion by overbearing, has been much rejuvenated by this system of close pruning. Mr. Haven claims that the long pruning, the elevation of the grounds, and the cultivation given, are the three elements that have given the crop. One fact was most evident, there are acres of vines groaning under a heavy, and in many cases, an enormous crop of fine grapes. The peach trees in fine healthy condition. Not a cherry or plum tree was dead out of several hundreds. The pear had suffered somewhat from the blight, and crop small and imperfect—Vicar of Winkfield looked well. Apple trees looked well and crop of fruit the best in every respect we have seen this season. The great bulk of the recent planting is the Catawba—very few Isabellas; there is also a nice collection of new varieties, of which we tasted among others, Herbemont, Blood's Black, Hyde's Eliza, Elsingburgh, Cassady, Diana, Hartford Prolific, Concord, Clinton, Clara, Rebecca, Child's Superb, Norton's Virginia, Te Kalon, and others.

We also visited the vineyard of Mr. Chas. Paffrath, which was very neat and clean, with some fine fruit. A row of vines in the protection of a close picket fence, had quite a fine show of fruit; but the long dead canes were present on every vine—and still there is hardly any difference in the elevation. The vines were up during the winter and the culture very thorough.

Since that, we have heard of another vineyard that has a magnificent crop—that of Mr. Justis Meyers, near Labadie, Franklin Co.

We give here but a cursory glance at a class of facts of the highest interest to us as a Society, and of immense value to the community, as tending to demonstrate the almost perfect adaptability of our broken uplands to the culture of fruit, and as illustrating the vast importance of close and continued observation of all the facts that are so closely intertwined with every step we take in our inquiries as to What, When, How, and Where to plant? and conceive it a duty from which such Societies as these cannot shrink without odium, to point out as clearly as possible whatever is erroneous, and point out and defend the truth as we find it, irrespective of personal feeling or of popular prejudice.

WM. HARRIS, L. D. VOTAW, WM. MUIR.

Mr. T. R. Allen was surprised; he had no idea of these inquiries being in progress, and was much gratified at it. He thought that the Vineyard Committee of the State Horticultural Society, was derelict in its duty in passing these vineyards, while they visited and reported vineyards which had not a tithe of the claim to public notice. Was glad this Committee had acted so completely, and suggested that the President appoint a committee to visit the grounds again.

The Secretary called attention to the vast number of caterpillars this season, and urged members to pay attention to those who had the eggs of the Ichneumon fly, which by hatching out on the body of the caterpillar destroy it, and are in all their stages of development, the friend of the cultivator of the soil.

The Fruit Committee reported on the table: By Mr. Jas. Shields, Buffum and White Doyenne pears, and Baldwin and King of Tompkins County apples. P. M. Brown, Rhode Island Greening, Ortley, Snow, and Fall Queen apples. Wm. Harris, Fall Pippin, Pryor's Red and Seedling apples, and Concord, Delaware, Bullitt and Muscatell grapes. L. D. Votaw, six varieties of Seedlings, all having special merit—one a fine, crisp, aromatic, conical, yellow apple with very small core, ripe; another of very brilliant colors and good; another that has the peculiarity of bearing on half the tree on alternate years; also the McKinley apple, and Logan, Creveling and Concord grapes. Mr. Allen, Fall Pippin apple, and Concord and Catawba grapes. Mr. C. H. Haven, Northern Spy, Cloth of Gold, Monstrous Pippin, Pumpkin Russet, Lady apple; White Doyenne, Steven's Genesee, Louisa Bonne de Jersey, Beurre D'Amanlis pears, and White Egg plum. Hon. P. Tippett, Aunt Susan's Favorite, as usual, large, fine, and much admired, and Mississippi Red apples. Wm. Muir, Summer Rose, Spice Sweet, Hawley, Keswick Codling, Maiden's Blush, Baldwin, Gloria Mundi, Pameuse, Milam, Gilpin, E. Spitzenberg, Red Winter Pearman, two varieties unknown; pears—White Doyenne and Ananas; grapes—Cape, Clinton, Marion Port, Hyde's Eliza, Mead's Seedling, Catawba, White Reissling. Geo. H. Gill, the largest and most perfect specimens of the Seckel pear seen by any of the members. Mr. Bell, fine samples, unknown.

The Flower Committee reported a very large and well developed Cockscomb, by Mr. W. Essex, and a fine collection of flowers by Mrs. Beale, embracing among other beauties, the Crape Myrtle, Madeira Vine, Passion flowers, Double Zinnia, &c.

The Vegetable Committee reports: Very good Red sweet potatoes by Wm. Harris, also, superior sweet potatoes by Jas. Shields. Extra fine Yellow, White,

and Iron field corn—very early; Early White Sprout potatoes—good; Long Scarlet radish—very large; turnips showing the effects of the dry weather, and Yellow and Red tomatoes, by L. D. Votaw.

The President announced that the next meeting will be held at the house of Mr. L. D. Votaw, near Eureka, on the first Thursday of October.

Alton Horticultural Society.

FRIDAY, Sep. 2, 1864.

Met at the residence of J. and F. Curtis on the Grafton road.

A letter from Henry Engelmann, Assistant State Geologist was read.

"I have examined," he says, "a salt obtained by Mr. James E. Starr, from under the limestone cliffs of his place, it proves to be the Epsomite (natural Epsom salt), which when pure is stated, in the hand books of mineralogy, to contain 16⅓ per cent. of magnesia, 32⅓ per cent. of sulphuric acid, and 51⅓ per cent. water of crystallization. It might be used as a manure, especially for clover, instead of gypsum; or Epsom salts might be made of it by dissolving and re-crystallising it."

The Committee on Entomology having been instructed to report on insects received at the last meeting, submitted the following.

J. E. Starr, a caterpillar in spirits, showing the cocoon of the Ichneumon fly which had fed on its vitals.

H. G. McPike, specimens of the magdy.

F. Starr. (Injurious), 54 varieties of butterflies and moths, 11 of the grasshopper family, 9 of bosirs, 3 snapping beetles, 12 beetles, 3 wasps, 3 curculios, squash bug, pea bug, cicadia, horse-fly, ants, and a bug resembling the squash bug, which is a veritable blood-sucker, and at least not refusing that of the human family. (Beneficial)—dragon fly, ant-lion fly, 2 kinds of tiger beetles, 2 lady bugs, lace wing, carrion beetles, 3 spiders. An insect resembling the horse-fly, name unknown; also 24 kinds of insects—habits unknown.

Among the butterflies and moths, we notice the codlin moth, destructive to apples; and the hawk moth, to tobacco.

The moths are attracted by lights in the night, and small fires built in the orchards and vineyards would destroy very many.

In the larva state, they can be destroyed by syringing with whale oil soap suds, by dusting with air-slacked lime, by crushing by hand, and by permitting hogs to eat the fallen fruit. Birds feed upon them, and they also fall victims to spiders and other predatory insects.

Among the grasshopper family, we find the grasshopper proper, the locust (tree), cricket and katydid.

Among the beetles, the May bug. This is very destructive to strawberry beds and meadows, in the larva state; and also to the leaves of cherry trees, in the beetle state. Hogs will root them out, but destroy the grass or strawberries.

The fires built for the moths would also destroy many beetles.

The curculio should have uncompromising war declared against him, and every means known should be employed to destroy him; jarring upon sheets is the most effectual, pasturing by hogs the easiest.

We have thus but glanced at the habits of a few of the insects exhibited, and at a few of the well known methods of destroying them. To enter fully into the subject would require more room than would be admissible in this report, and far more knowledge than is possessed by your Committee. Respectfully,

F. STARR. J. HUGGINS.

There was a splendid display of fruit.

The Special Committee on Planting Trees, reported as follows:

Apples 30x30, cherry 18x18, pear st. 25x25, root pruned 15, dwarf 10x10, peaches 18x18, plum 18x16, quince 12, grape 4x6, 6x6, blackberry 2x8, currant 4x6, gooseberry 4x8, raspberry 2x6, strawberry 1x4, hills 1½x2.

We would here mention the advantages of setting peach orchards in squares, each kind in a square of itself, thus: if 100 of a kind, set 10 each way. This will, by packing in the centre of the kind, be found an economical method.

The orchards should also be so arranged that hogs can be kept in such as it is desirable.

F. STARR. J. HUGGINS. F. CURTIS.

A. S. Redfield thought the report gave too wide distances for apple trees. He would crowd trees close east and west.

Dr. Long plants 33x33 diagonally, making the distance 27 feet one way.

W. T. Miller would plant 35 feet rather than less.

E. A. Riehl: Every one should plant according to the fertility of his soil; not less than 30 in poor soil and not less than 40 in rich.

J. Huggins: Set at first 32 feet, 16 years later at 30, feet, and still later at 25 feet, with additional tree in the centre of the square, late spring at 25 feet.

Dr. Long said it could not be shown that a rightly managed grain crop would injure an orchard. Would cultivate immediately after removing the grain.

Dr. Long presented specimens of clover stools tightly wound together by a leaf roller and killed. Has found it only on clover of two years' growth.

A committee appointed to examine a specimen of Catawba wine of 1863, presented by Mr. Stierits, reported: Of true flavor, high color, owing to the must being allowed to remain with the skins and stems. This latter mode of treatment also imparts an astringency to the wine which is considered by some as an excellence, and no doubt adds to its value in a medical view. Wine very clear and of great body. Your Committee regret to add that sugar was mixed with the must previous to fermentation. They think that wine from grapes should be pure without intermixture either of sugar or alcohol. The different quantities of grape sugar in the different varieties of grapes will make an agreeable variety of wine and serve to indicate the quality of the grapes and their perfection; whereas, if sugar be added it produces not only a sameness of flavor, but at once loses the character of pure wine.

Your Committee dwell upon this because they think it is very important that any of us who contemplate making any wine should start aright, and this they cannot do if they begin by adding sugar to the juice of the grape. Respectfully submitted,

J. M. PEARSON, Ch.

Mr. Huggins called special attention to the Howell pear as a fruit of great excellence and promise. Endorsed by Dr. Hull.

The meeting was largely attended by ladies as well as gentlemen, and the repast furnished by the hospitality of the lady of the house added no little to the feast of Pomological reason and flow of horticultural soul. Messrs. Curtis occupy 100 acres of land five miles distant from Alton, and within less than a mile of the Mississippi. Forty acres are in orchard, 30 in other crops, and 30 in woodland. The orchard contains about 2,500 apple trees, 12 years set, consisting mostly of Janet, Newtown Pippin, Ortley, Pryor's Red, Alexander, Yellow Belleflower, Fall Pippin, &c. The Alexander has proved very profitable with them, and they approve also of Early Harvest, Red June, Newtown Pippin, Rawles' Janet, Pryor's Red and Ortley as good varieties. Baldwin bears well, but here is an early fall apple. Roxbury Russet drops badly, ripens early, and is unprofitable.

There are also 600 peach trees in their orchard, 50 pear, 50 quince, and an acre and a half of strawberries. The apple trees are set 33x33 feet, with peach trees between a part.

Adjourned, to meet at Jonathan Huggins', near Woodburn, on the Alton and Woodburn road, at 10 o'clock, on Friday, October 7th.

[Written for the Valley Farmer.]

LILY BROWN.

She was quite young—some fourteen—but tall—above the medium height and slim. For the last year she had grown so remarkably, that but few of her acquaintances out of town knew her. But young as she was and slim, the woman told, in the slight risings at the reast, the flush on the face, and increased shyness.

The happiest being in town was Lily Brown. Her eye seemed almost always to dance, and her face—a rather pretty one—lit up with accompanying smiles. But, when unnoticed, she was sad: then the face had the sweetest of sad expressions. The nose was rounded, as if to assume the eagle, and the eye (in repose) the same: but all softened down by the gentleness of the sex. Her walk also was peculiar—uncertain, perhaps, because so tall her form, so that her toes were either inward or outward, as it happened, when she walked; her foot also was large—all indicating that she was to grow yet.

Of course, all were in love with Lily Brown, as she was called, her full name being pronounced by all out of respect to her—and also did people love her for what the face told was in the heart. Guile was not in Lily Brown. And she was but fourteen, lifted up into the world almost before she was aware—and she found it was a world that was jarring and crashing, with many feelings to sway it, so that she instinctively shrank from it—yet looked upon it. And when she looked upon it she would always see more or less tenderness expressed toward her, so that soon she began to have confidence, and ventured into society, and trembled, but found affection, real, downright affection. This, her own dear presence called forth, though unbeknown to her inexperience. Wise ones said, "This bud will grow into a fine lily—a mature woman, worthy of the first in the land—and she will command the first respect."

Her guardian kept the post-office. Now and then, but not often, would he be absent. Then his wife would see to the business. Once in a great while, like "once in a century," Lily would officiate. Was this not daring? I dare say it was. But she went, in the innocence of her heart, to do her guardian's work. And you could pick out, at long intervals, on the post-book, her neatly-written hand—the neatest I ever saw—like the distinguished alma mater's hand; and yet she never learned of alma mater. She taught herself, in addition to what the teacher of the district taught her. All, the entire neighborhood that knew, were surprised. I seemed to ascertain it first. It was while bearing a letter to the office. She was in attendance, and alone, blushing up to the whites of her eyes—and yet, we had been well acquainted always, and even familiar. But, for the last year, I had somehow seen her but little; there seemed a vacuum, and yet she was not absent.

Here she was, standing by the desk, tall, plainly dressed in her morning gown, unassuming—always unassuming—posting the letters. It was here that I first saw the exquisite hand, which was written as one breathes, so naturally. I thought it was an accident, or that I did not see correctly. Such poetry to be written in chirography by such a youthful hand, a mere child (in manner and heart as well), who had had but a few years of schooling, at the most.

And her tones were precisely like this hand. The hand was uniform, accurate, graceful.—There were no flourishes. So chaste, so simple it was; and yet there seemed the effect of some kind of ornament, some nameless grace, that redeemed it from all plainness.

But why so much about a hand (writing)?—Simply because it told what the girl herself was—for all about her harmonized with her hand. It was as natural for her to write well as for others to write ill. She could not help it. So she could not help her tones; nor the look of her eye; nor the color that came up to it.

She seemed proud of one thing, and one only. And I think it was all seeming. That was her hair. It was so long and heavy, it must have troubled her some; and for that reason it came down frequently, and had to be put up. She liked the brown color of it, for she liked brown—perhaps because her father's name was Brown.

I have seen her frequently busy with her hair. When she stood and flung it loose, it covered her shoulders, her back, and almost her whole form, tall as she was. She was bewilder-

ed amid her hair when some one entered—and then it was a sight worth seeing—to see the hair sweep about, and follow the maiden as she hastened away. And but a child: the mature woman was yet to come. But—it never came. This thin, frail form, foreshadowed what was coming. Means were taken to avert it; but all in vain. Every one understood it toward the last. She became pale; grew thinner, and taller, with spectral eyes and hair! I dare not say how the hair made her seem. So young! so mature!

And when the funeral took place, there was a concourse that never was equalled—in size, in respect, in deep, heart-rending sorrow.

It was a long, fine coffin. The pale, eagle-featured girl, the quiet idol of the whole village, lay there, so white! so placid! Ah! how it drew the tears of the people! for she died quite suddenly, and the features were, save a little wasting, intact.

This was a funeral indeed—and all for a child-woman. But it was the mature child, which meant woman—belonging to no one—belonging to the village: no single one could appropriate her—she must belong to us all. And so they all felt.

It was now, after she was dead and buried, that they missed her—although they had seen her but little before. But somehow they knew—they *felt*—that she was gone. Who was gone? An angel: an earth-angel. In heaven they have no angel so much beloved, unless it is she. And to meet her there, would not be a re-union of passion—only affection: more than sister; less than sweetheart: both combined, if possible, in full. And to meet her there, is the desire of every one—the hardest-hearted included. Bad men—old inveterate sinners—shed the tear at her bier. All are wishing, and many are praying, to meet her, where all hope to be. Such regret, for so much promise unfulfilled, and yet so much realized—such brilliant, sterling qualities, in one so young—withal so unassuming—all made an event that will never be forgotten.

MENTAL RECREATION.

We should sometimes indulge in reverie—if in no other way, we should set a time apart.—The humdrum business of life produces monotony. A change, therefore, is necessary—not only for the scholar or the professional man—the laboring man, as much as any, needs recreation—a change from his usual toil. Variety is not only the spice of life, it is a necessity; and mental recreation to the laborer, is as necessary as physical exercise to the thinking man. Yet it is not indulged in generally.

"What! a laboring man to get into reveries! that is silly."

Yes, it *seems* so—and the reason is, we are so unused to it. We plod, but never think—much less luxuriate. Not only is it congenial to health, but it is a positive enjoyment. To think about the things we like! We are very ap to do it. Why not do it abundantly—enjoy it to the full extent, so as to get up a revulsive action of the system, a change in the habit?

How easy this can be done! Simply indulge in the thought we are accustomed to delight in. Of course, the thing should not be made a business, to the neglect of other business. But now and then an indulgence in reverie—a letting the mind run on what pleases it—lost to everything but the subject.

We remember one of these times. We were on the roof of the house, surrounded by other roofs, with the world just below us, no one knowing of our whereabouts—the sky covering us with its dome, in June, as clear as a bell. Here we lay with our face to the sky, gazing into the depths of infinity. We saw but this great deep before us; and we followed up and up in thought, thinking of nothing else—only having to do with this clean sky, swept so often by the storm, so radiant with orbs, now lost in the blue. We wandered on and on, trying to pierce its depths, thinking of the angelic host that have their abode in this pure, unsullied place. When we became fully impressed with this thought and lost as it were, a slight strain of music reached us. It was indistinct, and we knew not where it came from—so it was easy to imagine it came from the sky; it was soft enough to be music from the heavenly choir. This lifted us, as it were, into the very presence of the angelic host, and where our friends are, purified and happy. It was the first decided impression of the kind we ever had. A chord that had lain dormant from our birth, now vibrated. It was the first touch of the pure heavenly that we had ever experienced, free from all earthly taint. We had forgotten our body and the scenes around us, and were near—on the verge of the better land, where we could just hear their singing—not singing, a mere echo as it were, a faint, soft sound.

This distance, this uncertainty, lent its enchantment. We were thrilled and pleased with perfect satisfaction. There was no pain of the

body, no distress of the mind: we thought only of the sound, of heaven, and we were lifted up seemingly out of the body, perfect and happy. It was but a touch, however. The next thought, and we saw the roofs and the sky again. The music still sounded indistinct—but the charm was broken. Still there was the pleasure subsiding in a delicious cadence.

This was worth a world to enjoy. It gave us a new piece of experience, and showed what the human mind is capable of. We have had similar experiences since. These reveries are god-sends, if we but knew it. It is not good to be always gross; we want sometimes to become etherialized—approach our original home, where the soul had its birth.

[Written for the Valley Farmer.]

THE PILES.

This is a complaint that is more general than most people suppose. When it exists, it is often a secret with the owner. It is aggravated in summer, and few people who arrive at advanced age are without it. When once established—that is, when the individual once has it—he is almost certain to get it again, and to be more or less afflicted through life.

It comes on by an obstruction of the circulation in the lower bowel—the rectum. This obstruction is caused by two principle things—costiveness, and straining at stool, the two having the same effect, viz., the arrest of the circulation of the blood in the parts affected. When the blood is thus stopped, it enlarges the veins; and thus knots or lumps, charged with blood, are formed. These forming an extension or enlargement of the bowel, are apt to protrude from the anus, and thus show themselves—that is, the rectum, charged with blood, appears on the outside, causing considerable trouble, and sometimes pain—sometimes severe annoyance. But the most of this inflation is inside, which causes a desire to evacuate, and generally is accompanied with more or less pain. Sometimes blood passes from the rectum. It is then called bloody piles.

The cure is the removal of the cause, unless greatly aggravated by neglect. Then, other treatment is necessary. Then, the physician must be called in. Counter-irritants are, at all times, good, applied just above the seat, as near the anus as possible. A mustard poultice is good, so are horse-radish leaves, or any substance that reddens well the skin. But this is only an assistant. The grand point is first to keep the bowels free—which is done by aperiant food, or slight cathartics. This will prevent further stoppage of the blood, and give the bowel a chance to evacuate itself. Secondly, avoid straining at stool, which is commonly the case where costiveness prevails. Avoid costiveness and straining at stool, then, it matters not how strong the desire to evacuate. It is a false desire, owing to the knots formed there, and must not be gratified.

In winter, the bowels are easy, and there is no occasion for straining. Hence, piles are comparatively little known in winter. But, in summer, attend to them. Be VERY careful about the straining, and about hard bowels, too. Sitting much is also a cause, or, rather an aggravation when the cause exists—so is riding. The bowel, when it appears, should be put back. Especially on retiring at night ought this to be done. This often has a good effect. But the main effect must be resorted to, or the smaller effects are of but little avail.

A. M.

THE POETRY OF NATURE.

Pleasant weather begets pleasant feelings, whether you are interested in it or not. It pleases everybody and everything. It is because it is poetry. Ah! could we render this on paper! Sometimes it is very nearly done! Sometimes the canvas but just escapes it. But the feeling is not there—contact. We feel the air and breathe the fragrance—the smell of the mould and the new grass. We also hear—what melody!—brook, bird and insect. So nature has the advantage. Hence we go abroad into the field, the wood, and revel in the open sky. This is pleasant—the sky so blue, so deep with infinity, beautified with its white clouds and its sunsets, and the glory of its fresh rising morns.

These things never tire, though they are repeated every year. In books they become weary when repeated, showing that there is a distinction between what God does and man does. Man cannot represent so well as God makes. We prefer the thing fresh from the hand of the Maker. But even then we get tired by long enjoyment. And why? Because the mind has its fill—more, would be a surfeit. So food is desired till we are satisfied. When the day's scenery passes, we are pretty well satisfied, and welcome with new pleasure the same sky, but not blue now—radiant with stars. Here is a different feeling. So the seasons have their variety, to stir our various emotions. All this is poetry in nature. Who can re-produce it successfully in books?

The summers are but one great season, interrupted by winter.

AUGUST.

The sun is up, illum'ng all the heavens;
There is no sound, save distant talk, and hum
Of industry. Sweet are the fields, and soft,
All carpeted with green, like June! 'Tis June,
With all the garniture of August. Leaves,
And fruit maturing, glad the eye, and add
Their beauty to the advent of the year.
Such morning has its sights. Fairest of all,
The blossom of the vine, the Orient's cup,
Alternating with spheres of gold. So bright
A cup, so rich, you ne'er may see, jeweled
With dew. The brown bee knows it, and
The cleanly humble-bee; and what broad leaves,
Dappled, and level as a floor; and here
The rain-drops dance and murmur, and the old
Earth hears it and rejoices, sending up
Her fragrance in return. And now so fresh,
So cool, with all this glory of the day
Upon it. Not the Asian sun more bright.
This is the Asian sun, and this the vine
It loves. Soon will it send still greater spheres
Of gold and green, and wider, dappled leaves,
Like mother with her offspring overgrown.
Pastoral and pleasant is all, and free
From all offending sights: only the thought
Of nature and of peace is here—man's home. F.G.

[Written for the Valley Farmer.]

Killing a Spider.

I just had a time with a most tremendous spider. He was almost more than my match. I had to laugh—and yet I was somewhat scared when I first saw him. He was the greatest, longest-legged animal of the kind I ever saw. I knew at once I was going to have a time.—How to catch a big spider is always a knack: I dread the job, they are always so spry. They will jump like a man. And this one! I had to laugh to think that so large a spider wanted to catch flies—had woven a net for such a small purpose. But I suppose he had to support himself. He had his web at the window, upper end, reaching from the window curtain (rolled up) to a pile of books on the shelf. It was a good-sized web. And there he lay at the mouth of the roll. How to make certain of him, I did not know. I was afraid of his long jumping legs—almost afraid of *him*. To think of such an animal in the room! the very father of all spiders—a lion, and no mistake. Once I thought of leaving him, to look at, on account of his great size and daring attitude. But that could not be endured. So great an enemy could not be permitted in the room. But how shall I get him—for certain? The broom which usually does such service, was thought of. I got the broom. I made a few motions. He cared not a snap for them. Then I struck with a lightning quickness; rubbed the broom down upon him; took the broom away, but there was no dead spider in its splints—and yet I was almost certain I had him, so sure and quick was the stroke. I unrolled the curtain, and there he was as cool as though nothing had happened—not harmed in the very least—not even scared a bit. Old fellow, thought I—and I gave the paper a sudden jerk—when down came his majesty—and did he leap a rod the first leap? Not he. He took it leisurely, though rather mortified at so humble a place. I hated to smash him on the carpet, he was so large. But just then he made a deliberate pass, for the lounge, when I also made a pass, involuntarily, and stamped on him: he was dead. He had not a chance to catch even one fly. His web had been made the night before. It was bran new and looked superb. The affair was a getting up that put common spiders to the blush—if such a face can blush. There is peace in the room now, after the storm. F.

Good Night, Sweet Babe—Good Night.

Sleep, sleep, my darling babe,
Thy mother's watching o'er thee;
Sleep, sleep, in slumbers sweet,
The angels hover near thee.
O'er one so pure, Heaven sheds its light—
Good night, sweet babe—good night.

Sleep, sleep, my darling babe,
Fear not, for naught shall harm thee;
Sleep, sleep, in slumber sweet,
Thy mother's blessing on thee.
May God protect thee with His might—
Good night, sweet babe—good night.

SMALL POX.

The following prescription is vouched for by the *Eastport* (*Me.*) *Sentinel*, as a cure for small pox: "Give to the patient two tablespoonsfull of a mixture of hop yeast and water sweetened with molasses, so as to be palatable, equal parts of each, three times a day. Children under 12 years of age should take two teaspoonsfull three times a day. Diet—boiled rice and milk and toasted bread moistened with water and without butter. Eat no meat. Give catnip tea as often as the patient is thirsty. When convalescent, give sparingly broiled beefsteak, lean, without butter, only the juice to be swallowed. Give physic when necessary. If the above treatment is strictly followed, no marks of small pox will remain.

How can I stoop? how can I kneel?
How can I worship at thy feet?
When thou art fenced about with steel,
An Amazon in mail complete?
I fear not Cupid's fiercest dart—
Am willing for thy sake to die;
But if a splinter chanced to start,
Why, dearest, I might lose an eye!
Ah, cruel! wherefore bear that mine
Of danger in thy crinoline?

HOW TO BAKE AN APPLE.

To bake an apple properly is a nice operation. A strong heat will express the juice, and lose you the benefit of it—of the very part you most want. The juice left in the apple—which slow cooking will do—will evaporate the watery part and leave the remainder in the apple, lessened, but concentrated, and consequently more relishable. This is what is wanted. By slow cooking, the process is done more thoroughly; it is done to the core, and the fruit is soft—cooked.

To bake so as to leave the apple whole, is always the best plan—or, if the skin is broken, and little or no juice escapes, little harm is done. The least cracking, however, shows that too much heat has been applied. Hence, cooking an apple as it should be cooked, is a slow process—at least of several hours' duration. Half a dozen hours are better than three. A large apple, of course, must have more time to cook—and a sweet more than a sour. When the apple is thoroughly cooked, it is a delicate thing—soft as velvet, and the skin like silk.—The thin, transparent cuticle is all that is wanted to hold the meat. Be always particular to select sound fruit; as the bitter inside never adds to the palatableness of a meal.

An apple should be so cooked as not to stain the tin, or but little. We prefer paper—not necessarily white—the clean leaves of a pamphlet. They will not communicate their odor to the fruit. They are clean and handy — no washing of tins afterwards, which, the way it operates, is quite a task; besides, the dish is soon made unfit for any other use. We have for years used the paper. A brick oven is the nicest place to bake your apples. Put in a few hours after the bread is out.

THE FRUITS AS A DIET.

All kinds of fruit, when largely indulged in, produce flatulency—that is, wind in the stomach and bowels. This is their nature; it thoroughly ripe, less so—but still flatulency.—Avoid, therefore, not the fruit altogether, but its excess. Moderately indulged in, it has a good effect, as, for instance, when used as a sauce, fresh from the field or garden, and not preserved in sugar, as is so often done, to the injury of mankind.

The garden, the orchard, and the field, have an abundance of fruit; and this fruit is intended for a summer diet—rather as a corrective of diet, as it is generally an aperiant (slightly laxative), and cooling from the acid it contains.

We all have been afflicted by over-eating of fruit. We all are afflicted as each season returns—for we are careless. The peaches and pears and delicious plums, and strawberries and tomatoes, and those dangerous deceptions the cucumbers—it is hard to withstand them—it is in fact out of human nature to resist them. The result is, we pay for our indulgence.

A moderate use of fruit (ripe) is a benefit—otherwise an injury—for you will as surely suffer as you violate. There is no getting around it. Not only does it trouble us, but many people die—from colic, dysentery and other difficulties. Gorged with fruit, the person becomes restless, uneasy—because, like the brute he is bloated. Such a man is not fit for society. He is fit to suffer, just as he does. The course between is the true course here.

Doctoring.—The following is so well put, we copy it. "There is a large class of persons who are the subjects of nervous diseases and general debility—who are beyond the reach of medicine. An honest practitioner tells them so, and recommends a course of diet and life not agreeable for the patient to follow. The doctor who does this is set down as knowing nothing, and the invalid, weak perhaps in mind as well as body, catches at everything which promises relief." Such people are incurable from the nature of their minds as well as their bodies; they know not enough to follow directions—or if they know, they have not the inclination—and they hate to do what goes against inclination. Hence they remain sick. These are the chronic cases of the world, that bother the physicians, distress the people around them, and are a burden to themselves. They are not to be reached (at least many, many of them,) because they are mentally infirm. Such people need help—help from their friends—not the physician. The friends must direct and aid in establishing a regular course of habit in diet and regimen generally.

Happiness always comes unexpectedly. This always gives character to this most interesting of subjects. Can we never, then, make dependence upon happiness? Never. It always takes us by surprise—agreeable surprise. We calculate about happiness—set the time—but are constantly disappointed.

When the sun shines, the plants laugh; when it rains, they dance.

The flight of a bird is always graceful; it cannot be otherwise. And what motions do we see! what diving and swinging—it is life on the wing.

Religion is a consolation. How many in all ages, and under all circumstances, have been comforted by the Church. The Church is a home—to many—religion a home feeling. We are taught on a mother's knee to pray; and in the church—house of worship—what sanctifying influences—what holy, home influences—a sort of pastoral feeling, akin to the fields, and the natal brooks, and our conception—our childhood's conception—of Heaven. There is corruption, bitter, fetid, in the Church. The wickedest of men are there; but this does not make the Church impure: its doctrines are the same; only wicked men have crept into it.—So all terrestrial institutions are more or less subject to taint in some way or other.

Earth has scenes so quiet, so pleasant, so pure, it seems paradise should be made of such. At such times it seems almost a miracle, to think of winter drifting here in its desolation—cold, frigid, white winter, where now all is so genial, life-breathing—the cattle contented, the children happy, the birds, the insects and the brooks, all active, all enjoying the season of growth and animation. The clouds lie lazily, enjoying the picture. How the hills round up with their cones of green, like breasts of a goddess—of some giant of the ancient time. Death is unknown here—war forgotten. Love is known; smiles are seen in eye and lip. There is music; there are low whispers. This is the age of our childhood again, with the best of manhood added.

CHRIST BLESSING LITTLE CHILDREN.

Our Saviour when on earth, spent his life in doing good, comforting the sorrowful, healing the sick, restoring the blind, the lame, raising the dead, and not least in the wonderful series of his acts of mercy was that of blessing little children. Many, no doubt, among the vast multitudes that thronged him, were surprised to see these little ones taken in his arms to receive the gracious blessing from his lips—their ambition looked for worldly marks of glory and greatness, and when the mothers brought them to him, they were chided—but Jesus said "Suffer little children to come unto me, and forbid them not; for of such is the kingdom of heaven"—thus rebuking their pride and ostentatious interference.

[Written for the Valley Farmer.]

SOWING SEED.

Be careful what you sow!
The world is full of seed—
And you—you have a share to sow.

Each sows his seed—
For pleasure or for need:
And what he sows, he reaps.
The little seed will grow a tree
That shadows all the soil—that drowns 't may be
The tender plant that creeps—
That needs thy tender care.
Beware then how thou sowest—
What seed thou trustest to the earth.
Little thou knowest
What fruit thy seed brings forth
If careless, inconsiderate, thou art—
For weeds will always flourish most.

This is thy part:
Sow early—sow good seed,
And trust the Gardener—for thy need—
Who keeps his storehouse in the sky,
And sends his showers from on high,
"The early and the latter rain,"
With flowers and sunlight on the plain.

But sow not tares, nor weeds.
Ill fares the man who soweth noxious seeds.
He will find pain instead of rest;
The thorn will rankle in his breast;
And life a poison prove
To happiness and love.

But sweet the fruits of charity,
That grow from love, and work in deeds,
Supplying daily needs,
And giving largest liberty. F.G.

SCRAPS.

Stimulants are necessary (food is a stimulant) —but excess should be avoided. Here the "course between," comes in good. Excess of alcohol is not worse than excess of food. Both are a debauch. Go back to the middle—to moderation; or, if you have a frail will, let alcohol alone.

Walking is not so good an exercise as riding on horseback—but it is handier. Brisk walking will do better. Pleasureable exercise is the best of all, as is getting to be well known.

Appetite of all kinds is necessary—but, oh! how dangerous! How it leads us into difficulty and often into death, disgrace, perdition. We all have to repent here. Those are happiest who have learned the habit of controlling appetite.

Patience, I sometimes think, is the greatest of the virtues.

Domestic Department.

Cookies.—2 eggs, ½ teacup sour milk, 1 teaspoon of soda dissolved in cold water, 2 teacups sugar, 1 of lard, just enough flour to make a soft dough, roll thin, bake quick.

Bruna Vista Cake.—3 eggs, 1½ teacups sugar, 1 of butter, ½ cup sweet cream, ½ teaspoon soda, 1 teaspoon cream tartar, 1½ pint flour, bake in a buttered pan.

Molasses Gingerbread.—1 quart good molasses, ½ teacup of soda beat in the molasses, 1 large tablespoon of ginger, 1 teacup buttermilk, 1 of butter, flour enough to make a soft dough, roll ¼ inch thick.

Indian Pudding.—Two quarts of milk, two heaping teacups of Indian meal, two tablespoonfuls of flour, teacup of molasses, small piece of butter, salt and sugar to taste. Boil milk, mix flour, meal and salt together, stir with milk while hot, boil molasses and stir in; after the pudding is in the oven, pour a cup of cold milk into it, but do not stir it. Bake two and a half hours.

Remedy for Cuts or Sores.—Take spirits of turpentine, put in a cup, and hold it over the fire until it smokes, then take a swab about the size of a match, and touch the part affected two or three times. It is drawing and healing, and should be used two or three times a day; after it is applied, salve should be put on, which will relieve the pain greatly.

To Fry A Beefsteak.—An exchange says: "Put into a pan a steak chopped and rubbed freely with butter, or beef dripping, or good lard. Pour into the bottom of your pan a tea-cup of boiling water. Set the pan over coals, and cover it with a hot lid; when it has cooked tender and brown, take it up, sprinkle with salt and pepper, and keep it hot."

Another paper says: "This is a good way to spoil a beefsteak. The gridiron is the proper utensil for the purpose; but when this cannot be had, a steak can be well cooked in a frying pan by the following method. Put the frying pan on the fire with melted lard or pork fat. Let the fat get so hot that a piece of bread put in browns immediately. Then put the beef in and cook it three or four minutes, according to size. The fat should boil. By this method, the juices of the meat are retained, and the exterior is brown and inviting. Putting a beefsteak into a cold pan with a cup of boiling water, stews it, and the flavor is in the water while the meat is tasteless."

Potato Soup.—To three quarts of boiling water, add two quarts of peeled potatoes, measured; after cutting in thin slices three or four good slices of pork, add one ounce of butter; when well done, thicken with a little flour and cream, pepper and salt to suit your taste. Any good cook can vary it by using dried beef instead of pork, milk instead of cream, richer or not so rich, for strong or weak stomachs, early or late in the day.

To Roast Geese or Ducks.—See to it that they are well dressed, and then boil them an hour or more according to their age. When they begin to feel tender, take them out, and having your stuffing prepared, of bread, salt, pepper, and butter—some like sage—made soft, fill the body and fasten it up with thread. Roast them brown. Make your gravy of the dripping; serve both with apple sauce. Poultry when roasted or boiled, should have the wings and legs fastened close to the body, with a cord tied around.

Felons may be prevented by dipping the part in hot lye. A pricking sensation is generally the first warning of their approach.

Editor's Table.

American Pomological Society.

We are happy to announce to our readers that the next meeting of the American Pomological Society will be held in the city of St. Louis. We presume our friend Wm. Muir, Esq., who attended the late meeting at Rochester, aided greatly in bringing about this result. If we have a good season for fruit, we think we will be able to show our Eastern friends the superiority of our soil and climate for the production of fruit.

We give an abstract of the proceedings of this Society at its late session at Rochester, prepared by Mr. Muir. We are under great obligations to him for this early report. It will be found in another column.

Large Sale of Wool.—On Tuesday last, the firm of Kerr, White & Co., Commission Merchants, sold to Messrs. Thorp & Co., 11,000 lbs. of wool. We believe this is the largest lot of wool ever raised in this State by one farmer—it was raised on the farm of Richard Gentry, of Pettis County, and is said by judges to be the finest lot and quality ever offered in our city, and the price realized was the highest ever obtained in this market. It was sold on private terms.—[St. Louis Price Current, Aug. 25, '64.

We refer our readers to the advertisement of Wm. Lucas, Esq., published in another column. He offers his place for rent for 5 years, 20 acres under culture, ½ acre in grapes, 125 dwarf pears, house, stable, green houses, &c.

A French gardener finding a piece of woolen cloth, which the wind had lodged in a tree, covered with caterpillars, acted upon the idea suggested, and placed woolen rags in several trees. Every morning he found them covered with caterpillars, which were easily removed.

How to Plant Apple and Other Small Fruit and Tree Seeds.—Soak your seeds for twenty-four hours or more, in warm water. Mix thoroughly with treble their bulk of moist earth; place it in a shallow box with cracks in the bottom, and sink this box level with the surface of the earth, covering the top with two inches of soil, and thus let them remain till spring. As soon as the ground is fit to work in spring, plow, harrow, and otherwise make your ground mellow and level, pulverizing all the lumps. Rake off smooth as for onions. Put down your line and dig a drill two inches deep under it; take out your seeds and sow in the drill, covering them about two inches, by making a little watercourse along near the seeds. Pat the loose earth along the row with your hoe, and keep the ground moist, and the young trees will be up in from two to three weeks.

Soil for Grapes.—The discussion on Grapes at the late meeting of the Ohio Pomological Society at Toledo, among other things introduced the question as to the soil on which the best quality of grapes were grown. There seemed to be but one opinion, and that was, that a strong, clayey soil, or one of loamy clay with a limestone or even slaty clay sub-soil produced grapes much heavier in must, and therefore of better quality than any variety of sand or alluvial deposit. In all cases, however, under-drainage was spoken of as necessary to success in grape growing.

CONTENTS OF NO. 10.

L. B. Silver, of Salem, Ohio, the Poultry Man, has written brief and practical Notes on Poultry, giving his many years' experience with the best breeds of Fowls, their management and treatment, that insures fresh eggs every week in the year. Price only 50 cents. Sent free by mail on receipt of the price. Every owner of a pair of fowls ought to have a copy.

THE ST. LOUIS NURSERY.

We have a superior stock of Trees for sale the present fall, embracing all the popular kinds adapted to cultivation in the West. It has been a leading idea with us, to discard all varieties not adapted to our climate, however well they may succeed in the Eastern States, knowing that we have plenty of varieties for all seasons, that do succeed admirably here.

Our stock of Apples is large, price 25cts. each, $20 per hundred. We have the best assortment of Market varieties of Peaches in the West. We can give a complete succession of varieties, from the very earliest to the very latest. A large stock of that popular new variety, Hales's Early, at 40 cts. each. Price of peach trees by the 100, $25. They are of fine size and quality. Of Pears, Standard and Dwarf; Cherries, Plums, Apricots, Nectarines, and Quinces, we have a fair supply.

Our stock of Small Fruits is very large. We are cultivating these largely for the St. Louis Market, and our supply is very large and superior.

Orders thankfully received. For further particulars, address,

N. J. Colman & Co., St. Louis, Mo.

TO GARDENERS AND FLORISTS.

I hereby offer my place for rent for a term of five years, or more. It consists of about twenty acres under cultivation; half an acre of bearing Concord grape vines, and about 125 dwarf pear trees of the best kinds. There are upon the premises, a good house of three rooms, stable, etc; also two greenhouses, one 74x20 feet, span roof, also one lean-to-house, 60x13 feet, with good propagating apparatus. There are glass-houses, sash, etc., over 6,000 feet of glass, part of which I will sell or rent. There are also in the green-house, and being put in at present, from 25,000 to 40,000 greenhouse plants of most desirable kinds, consisting in part of Camelias, Azaleas, Fuschias, Pelargoniums, of splendid growth and most desirable varieties, all of which I will sell upon most liberal terms to one who wishes to engage in the plant business, and will rent the place. For further particulars and terms, apply to the subscriber at the office of James H. Lucas, Esq., or to Andrew Van Zoyst, upon the premises.

WILLIAM LUCAS,
"Shiloh," next summer residence of James H. Lucas,
St. Charles Plank Road.

Sept. 20th, 1864.

GOATS WANTED.

I wish to purchase fifty Nannie Goats. Those having any to sell will please address me at St. Louis, stating price. Norman J. Colman.

Hartford Prolific Grape Vines.—

We have a large stock of strong, well-rooted layers of the Hartford Prolific Grape, which we will sell at $30 per 100. This is acknowledged to be the best EARLY MARKET GRAPE in our climate. It is very productive, and is far better in quality than when grown North. Our stock of CONCORD, TAYLOR'S BULLIT, &c., is also large.

N. J. COLMAN & CO.

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